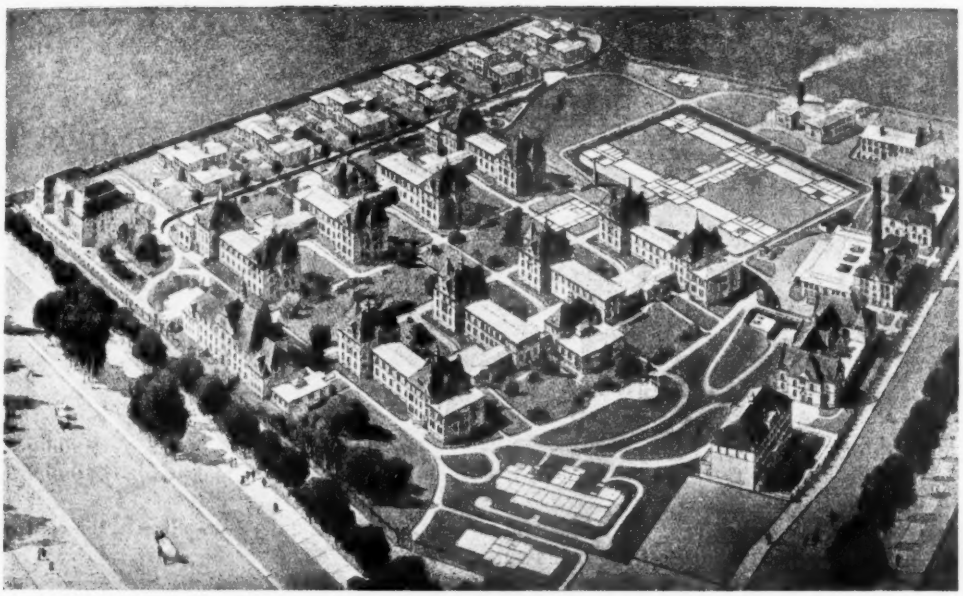


FIG. 6.—PERSPECTIVE VIEW OF THE WEST END HOSPITAL, CHARLOTTENBURG (*see page* 39).

MODERN GERMAN HOSPITAL CONSTRUCTION.

By WILLIAM MILBURN, Junr., B.Sc. [*A.*], Henry Saxon Snell Prizeman 1908, Godwin Bursar 1910.

THE study, thought, and attention given to the design, construction, and equipment of hospitals, the large increase in the numbers of these institutions during the last thirty to forty years, and the developments which have taken place during that time in the treatment of the sick, render a study of modern German hospital construction of the utmost interest.

In Germany the general hospitals are erected, equipped, and maintained by the municipalities, each city possessing one or more hospitals according to the population. The system in vogue of compulsory insurance against sickness has had considerable influence on the development of the present hospital system. The institutions are open to all classes of the community, the fees varying from 2*s*. 6*d*. to 15*s*. or 20*s*. per day according to the accommodation.

The University hospitals or "Royal Clinics" are supported by the State and are the centres for medical education and study. The special hospitals correspond to the majority of our charitable institutions for the treatment of the sick, they being endowed or supported by some charitable organisation or religious body, such as the Jewish Hospital at Cologne or the Bürgerspital, Frankfort.

The private clinic or polyclinic, numbers of which are found in every city, is an essentially German institution, founded on club practice, the members being treated as out-patients by the medical officer attached to each clinic. The private hospitals are really nursing homes for the treatment of in-patients.

During recent years very great attention has been paid to post-graduate study and research.

and at present regular courses are given in no less than forty-six cities, while an interesting result of the movement is the establishment of Academies for Practical Medicine in non-University towns, such as Düsseldorf and Cologne.

SITE.

In the selection of sites for the hospitals the greatest care is exercised so as to obtain ample space, pure air, light, and freedom from noise and dirt, the situations being usually on the outskirts of the cities or adjoining large open spaces. The relation of the site to the prevailing winds, the factory and smoke-producing quarters of the city, the ground water level, the height above adjoining rivers, and the subsoil, are all matters which receive the greatest attention. Whenever possible, land which has not previously been built upon is selected, and if practicable streets are arranged on all sides. The electric tramway service invariably connects all parts of the city with the hospital.

The area of the site per bed varies considerably, at Hamburg Eppendorf it being 130 square yards, at Nuremberg 123 square yards, at Dresden 86 square yards, at Hamburg St. Georg 72.7 square yards, at the Virchow, Berlin, 153 square yards, and at Charlottenburg 131 square yards.

The sites for the University hospitals and polyclinics are naturally more often in the centre or near the centre of the cities than on the outskirts.

ACCOMMODATION AND STAFF.

In comparison with the accommodation of the average English hospital, that of the German institutions is very large, as for example Hamburg Eppendorf and the Virchow, Berlin, each with 2,000 beds and a correspondingly large staff. It has been found, however, that when such a large number of patients are massed together the difficulties of administration are greatly increased, and the most recent view seems to be that 1,500 beds should be the maximum for one hospital.

In the majority of towns one general hospital is sufficient to meet the requirements; the larger, however, have more, Munich having three, Dresden two, Hamburg three, and Berlin four.

Generally speaking, every general hospital provides accommodation for all classes of cases, which are separated into departments for medical, surgical, infectious, maternity, gynæcological, children's, skin and venereal, etc., diseases, the buildings for each of these classes being specially designed and equipped to meet the requirements of each particular disease.

The administration of the hospitals is usually under the control of a superintendent director (Verwaltungs-Direktor), while two medical directors have charge of the medical and surgical departments respectively. All doctors are paid for their services, and the larger number reside in the hospital. The nursing staff corresponds to the English, usually consisting of a matron (Oberschwester), head nurses (Schwestern), and nurses or probationers (Pflegerinnen), while in some hospitals the nursing is in the hands of a religious sisterhood. A large proportion of the domestic and technical staffs reside in the hospital.

GENERAL ARRANGEMENT OF THE BUILDINGS ON THE SITE.

Owing to the varying requirements of the municipalities, considerable differences are found in the lay-out of the general hospitals, and a great variety of plans are found; but nevertheless, in a survey of the block plans of the principal hospitals erected during the last thirty or forty years, one can trace a definite development, largely owing to the fact that each new hospital is based on a careful study of contemporary designs and on all that have preceded it.

The modern era of German hospital construction may be said to date from the erection of the Moabit Hospital, Berlin, 1872, which, guided by the lessons derived from the Franco-German and the American Civil Wars, is designed on the pure pavilion system, in which each block is entirely separate and detached from the rest. Here [fig. 1] the administrative block is placed adjoining the main entrance, and the domestic and technical blocks are grouped close to it, while the plan is laid out about a central axis with the pavilions of the medical department to one side and those of the surgical to the other, all the pavilions being of one story. Further developments may be traced in the lay-out of the second great Berlin hospital at Friedrichshain, 1874, where two-story pavilions were employed and a modification in the block plan was introduced, owing to the adoption of the north and south axis for the pavilions as against the east and west at Moabit, and in the next Berlin hospital, Am Urban, 1883-90, where a simple symmetrical plan was obtained.

The Eppendorf Hospital, Hamburg, perhaps the most celebrated hospital in the world, opened in 1889, is designed in the pure pavilion style and has been so well kept up to date by additions and improvements that it holds its own with many of the more modern institutions. The hospital is situated in Eppendorf in the north of the city, its distance from the central point, the Rathaus, being, as the crow flies, 2 4/5 miles. The total area of the land purchased by the municipality was about 136 acres, of which the hospital proper occupies about 46 acres, while the maternity, epidemic, and ophthalmic departments occupy another portion, and the remainder to the front of the hospital is laid out as a public park. The total accommodation is 2,150 beds, while the staff numbers 820, of whom some 670 reside in the hospital.

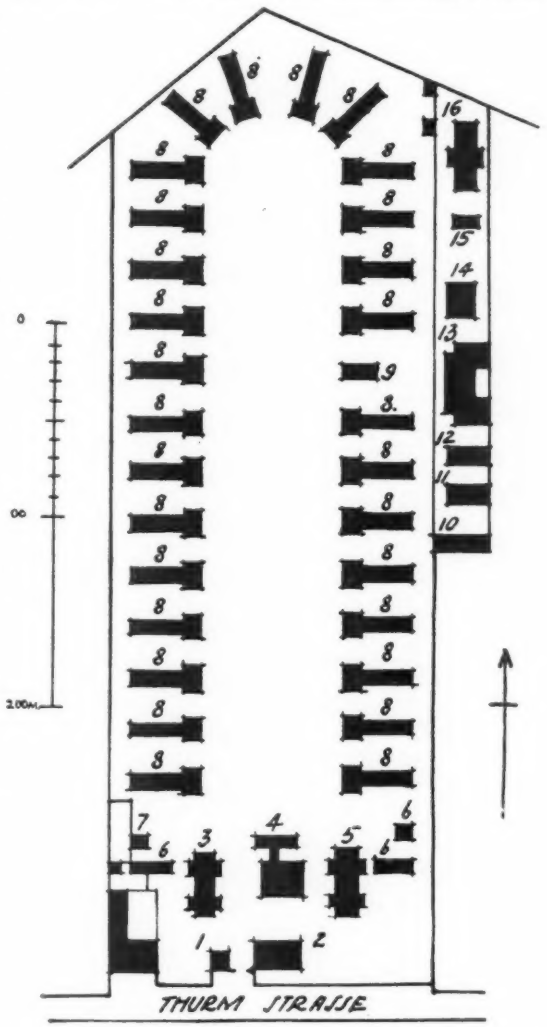


FIG. 1.—BLOCK PLAN OF THE MOABIT HOSPITAL, BERLIN.
1, Entrance Lodge. 2, Administrative Block. 3, Kitchen Block. 5, Laundry Block. 8, Pavilions. 13, Boiler House. 16, Mortuary Block.

As will be seen from the block plan [fig. 2], the institution consists of over 100 separate buildings, of which some 85 are for the reception of the sick, symmetrically placed upon the site about a central axis, which separates it into two sides, that for men to the east, for women to the west.

The administrative block, through which all patients must pass, is situated at the southern

end of the axis, and the pavilions, the majority of which are of one story, are arranged in parallel rows with streets and gardens between them, their long axes running from north-west to south-east. The first two rows form the surgical department, the next three the medical department, the next the tuberculosis department, while the remaining seven blocks, which

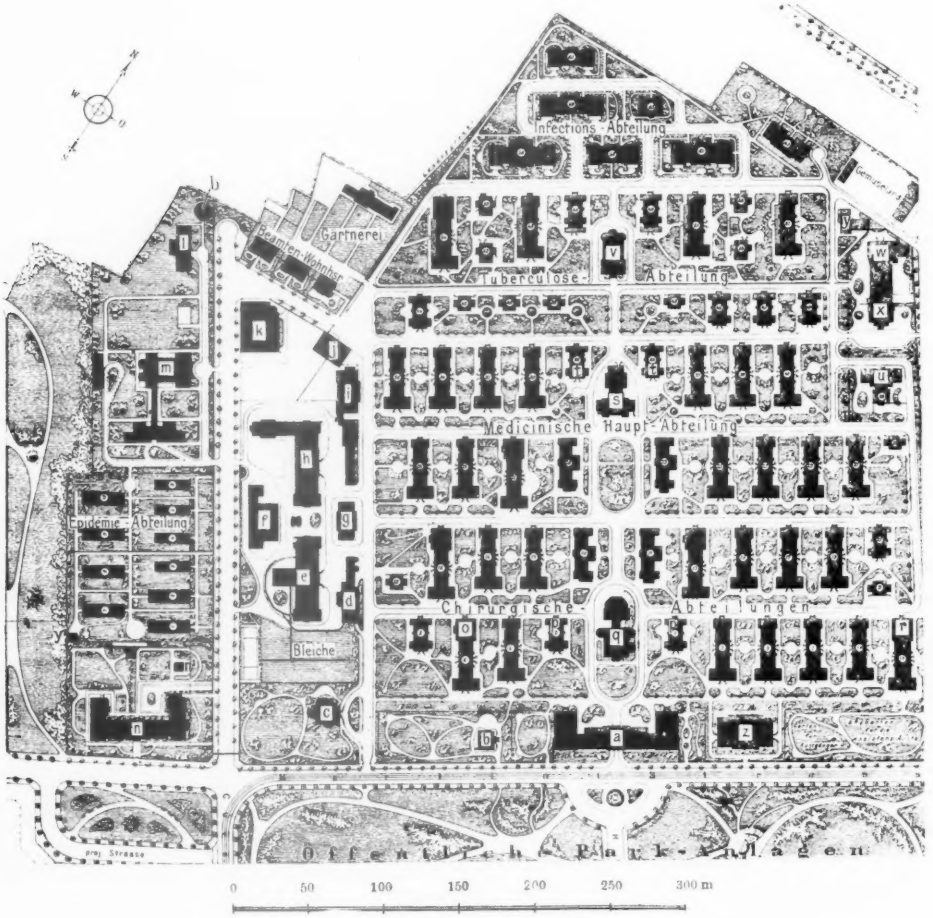


FIG. 2.—BLOCK PLAN OF THE EPPENDORF HOSPITAL, HAMBURG.

(Chirurgische-Abteilungen = Surgical Department. Medizinische Haupt-Abteilung = Medical Department. Tuberculose-Abteilung = Tuberculosis Department. Infections-Abteilung = Infectious Diseases Department. Epidemie-Abteilung = Epidemic Department.)

a Administrative Block. **b** Administrative Director's Home. **c** Medical Director's Home. **d** Disinfection Block. **e** Laundry Block. **f** Boiler House. **g** Economy Block. **h** Kitchen Block. **i** Nurses' Home. **j** Ice House. **k** New Boiler House. **l** Maternity Department Isolation Block. **m** Maternity Department. **n** Ophthalmic Department. **o** Children's Pavilion. **p** Receiving Pavilion of the Surgical Department. **q** Operation House. **r** Children's Pavilion. **s** Bath House. **t** Receiving Pavilion of the Medical Department. **u** Delirium Tremens Pavilion. **v** Clinical Lecture Theatre and Röntgen Institute. **w** Pathological Institute. **x** Mortuary Chapel Block. **y** Drainage Disinfection Block. **z** Curative Gymnastics Block.

were erected in 1905-7, form the infectious diseases department. In the centre of the surgical department is the operation-house, in the centre of the medical the bath-house, and in the centre of the tuberculosis the Röntgen Institute. The domestic blocks, comprising the kitchen and laundry blocks, boiler-house, and disinfection block, are grouped together beyond a street

to the west of the women's side, while still further beyond are the pavilions of the ophthalmic, epidemic, and maternity departments.

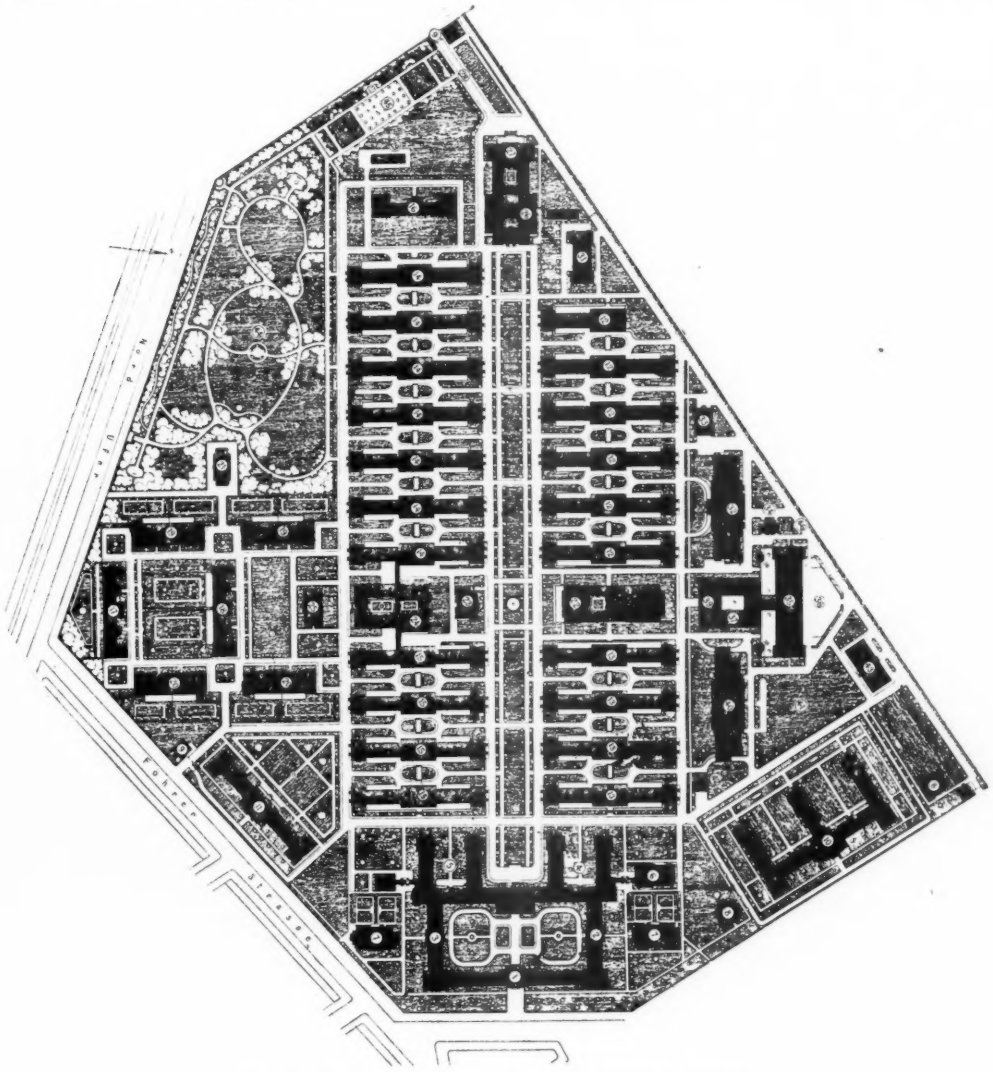


FIG. 3.—BLOCK PLAN OF THE VIRCHOW HOSPITAL, BERLIN.

Administrative Block. 2, Medical Officers' Home. 3, Nurses' Home. 4, Gynæcological Department. 5, Maternity Department. 6, Medica Officers' Casino. 7, Directors' Houses. 8, Officials' Houses. 9, Lodges. 10, Skin and Venereal Diseases Department (Men). 11, Skin and Venereal Diseases Department (Women). 12, Medical Department (Men). 13, Medical Department (Women). 14, Surgical Department (Men). 15, Surgical Department (Women). 16, Violent Patients' Pavilion. 17–21, Infectious Diseases Department. 22, Bath House. 23, Dispensary. 24, Operation House. 25, Röntgen House. 26, Pathologic-Anatomical Institute. 27, Mortuary Chapel. 30, Anima House. 31, Disinfection Block. 32, Kitchen Block. 35–39, Boiler and Engine House Block. 40, Laundry Block. 43, Workshops.

Other fine hospitals erected on the pure pavilion system are the Johannstadt Hospital, Dresden, 1901, the reconstruction and reorganisation of the St. Georg Hospital, Hamburg, 1899-1910, and the General Hospital, Nuremberg, 1897.

The latest hospital erected in the pure pavilion style is the Virchow Hospital, Berlin, opened in 1906, which is said to be in many respects the finest hospital in the world. This is the fourth municipal hospital for Berlin, it being situated on a site, formerly an artillery parade-ground, some 63½ acres in extent, in the northern quarter of the city close to a large wood. The total accommodation is 2,000 beds, and the staff numbers some 700, who reside in the hospital.

The buildings [fig. 3] are symmetrically placed about two axes, the principal from east to west, the transverse from south to north. Controlling the main entrance to the hospital is the administrative block, which with the doctors' and nurses' homes and the maternity and gynæcological departments is planned round a courtyard. The principal axis then traverses the central avenue some 500 yards long and 40 yards wide, at the western extremity of which is the mortuary and pathological block with separate access to the adjoining street. To the

Fig. 4.—The Surgical Department, the Virchow Hospital, Berlin.

south of the central avenue are the pavilions of the surgical department [fig. 4], to the north those of the medical department. The transverse axis divides the hospital into two sides, to the east for women, to the west for men. At the southern extremity of this axis is the infectious diseases department with separate access from the Föhrer Strasse. In the centre of the surgical department is the operation-house, and in the centre of the medical the bath-house, while at the northern extremity of the axis are the domestic and technical blocks comprising the kitchen and laundry, boiler and engine-house, etc., with separate road for external traffic. Separate blocks are provided for men and women for skin and venereal diseases, and a separate pavilion for violent patients. There is no system of classes of patients in this hospital. The institution is remarkable for the lay-out of its grounds, some two-thirds of which consist of parks and gardens planted with trees and flowers.

There are, however, great disadvantages in the pavilion system proper, for it can well be imagined that in wet and stormy weather the difficulties of transporting the patients from the

pavilions to and from the operation-house, the conduct of the various services, and the conveyance of the food from the kitchen block, become very great, and considerable inconvenience is caused to the staff and patients thereby. The majority of the recent examples either show or have the tendency to adopt the combined corridor and pavilion system, in which the separate blocks are linked up to one another by closed corridors.

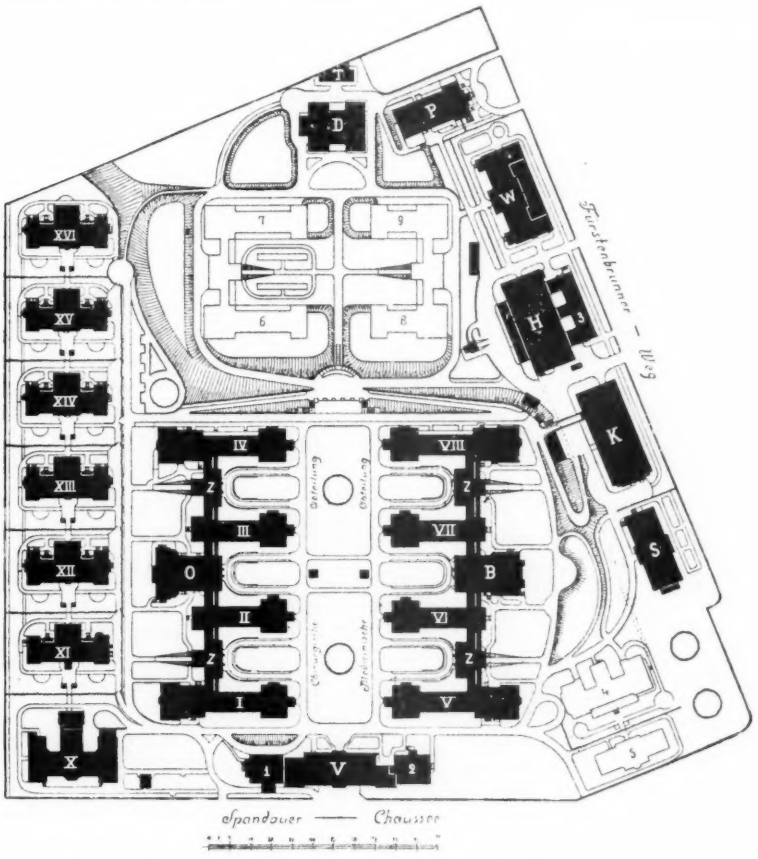


FIG. 5.—BLOCK PLAN OF THE WEST END HOSPITAL, CHARLOTTENBURG.

V. ADMINISTRATIVE BLOCK.—1, Receiving Department; 2, Dispensary. I–IV. SURGICAL PAVILIONS. V–VIII. MEDICAL PAVILIONS. X. GYNÆCOLOGICAL PAVILION. XI–XVI. ISOLATION PAVILIONS.

O, Operation House. B, Bath House. Z, Receiving Blocks. P, Pathologic-Anatomical Block. T, Block for Experimental Animals. D, Disinfection Block. S, Nurses' Home. K, Kitchen Block. H, Boiler House Block. 3, Staff Homes. W, Laundry Block. 4, Future Private Patients' Pavilion. 6, 7, 8, 9, Future Pavilions. 5, Future Block for Gymnastic Exercises.

This is well seen in the block plan [fig. 5] of the West End Hospital, Charlottenburg, opened in 1904. Here the administrative block controls the main entrance, and the pavilions of the medical and surgical departments are symmetrically placed to the rear on either side of a large open space. The pavilions are of two stories, and it will be seen [fig. 6, p. 33] that those of the surgical department are linked up to one another and the operation-house in the centre by a closed corridor, as are those of the medical department to the bath-house. The pavilions of the infectious diseases department are one-story detached blocks to one side

of the site, while at the other side adjoining the street and at a lower level are the domestic and technical blocks; the food service to the pavilions on the higher level being conducted from the first floor of the kitchen block over a bridge.

Cologne Lindenburg, 1908 [fig. 7], shows a still further development in that the two parallel connecting corridors are carried through to the administrative block, linking up the latter to the pavilions of the medical and surgical departments and the operation and bath houses. This hospital is one of the most interesting modern German institutions, the greatest care having been expended in its planning, construction, and equipment. The building originally on the site was a lunatic asylum, which with new buildings added in 1897 and 1900 was transformed into a general hospital. In 1905, a much larger site to the east having been acquired, the new hospital, with which is incorporated the Academy of Medicine, was erected, and the older buildings reconstructed, which accounts for the asymmetrical arrangement of the domestic and technical blocks and the pavilions of the infectious diseases department. The total accommodation is 1,108 beds.

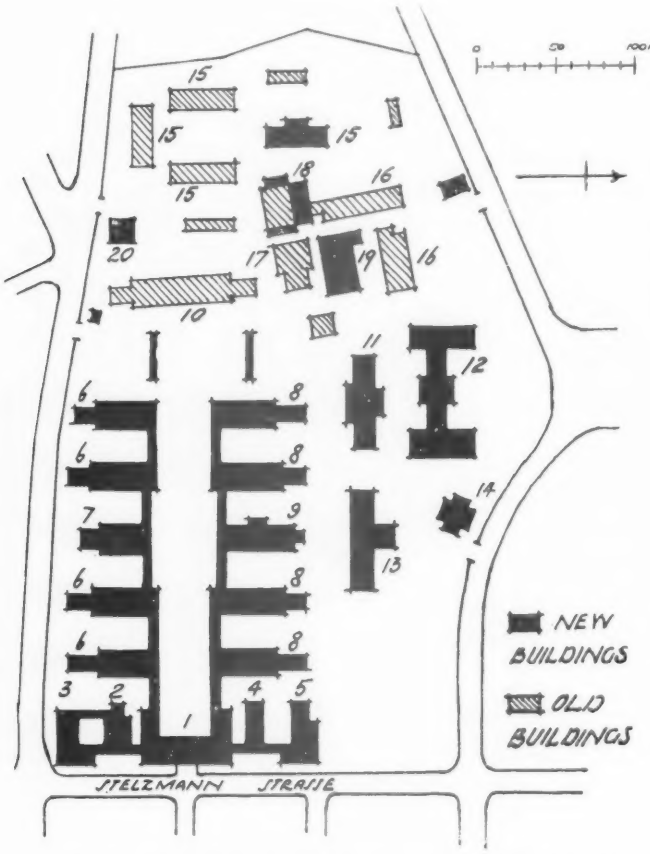


FIG. 7.—BLOCK PLAN OF THE LINDENBURG HOSPITAL, COLOGNE.

1, Administrative Block. 2, Chapel. 3, Nurses' Home. 4, Hall. 5, Private Patients' Pavilion. 6, Medical Pavilions. 7, Bath House. 8, Surgical Pavilions. 9, Operation House. 10, Tuberculosis Pavilion. 11, Pathologic-Anatomical Block. 12, Psychiatrical Clinic. 13, Children's Clinic. 14, Mortuary Chapel. 15, Infectious Diseases Pavilions. 16, Skin and Venereal Diseases Pavilions. 17, Kitchen Block. 18, Laundry Block. 19, Boiler House Block. 20, Disinfection Block.

Finally we come to the Third Hospital, Munich, 1908 [fig. 8], which is from every point of view of the greatest interest. The site is about 45 acres in extent and is situated in the northern portion of the city, being practically surrounded by open country on all sides. Owing to the high level of Munich and the sudden changes of temperature to which it is subject, it was thought inadvisable to erect a large number of detached one-story pavilions holding from 30 to 40 patients each, as in the older type of hospital, and better to erect large blocks of three stories, each holding some 150 patients, and connect the whole of the pavilions of the medical and surgical departments, the operation and bath houses, the administrative block, and the kitchen block by closed one-story corridors.

The administrative blocks and nurses' home face the Cölner Platz, two parallel corridors with an interspace of some 60 yards branching off to the north. Disconnected from these by cut-off corridors are, to either side, the six large pavilions. The vertical axis of the plan in this case separates the hospital into men's and women's sides, not as at the Virchow, Charlottenburg, or Cologne Lindenburg, the transverse axis; so that the operation-house and the bath-house are placed on the central axis between the first and second pairs of pavilions respectively, and are approached from either side, while the kitchen block is placed between the third pair of pavilions. Three courts are thus formed between these buildings, but as the

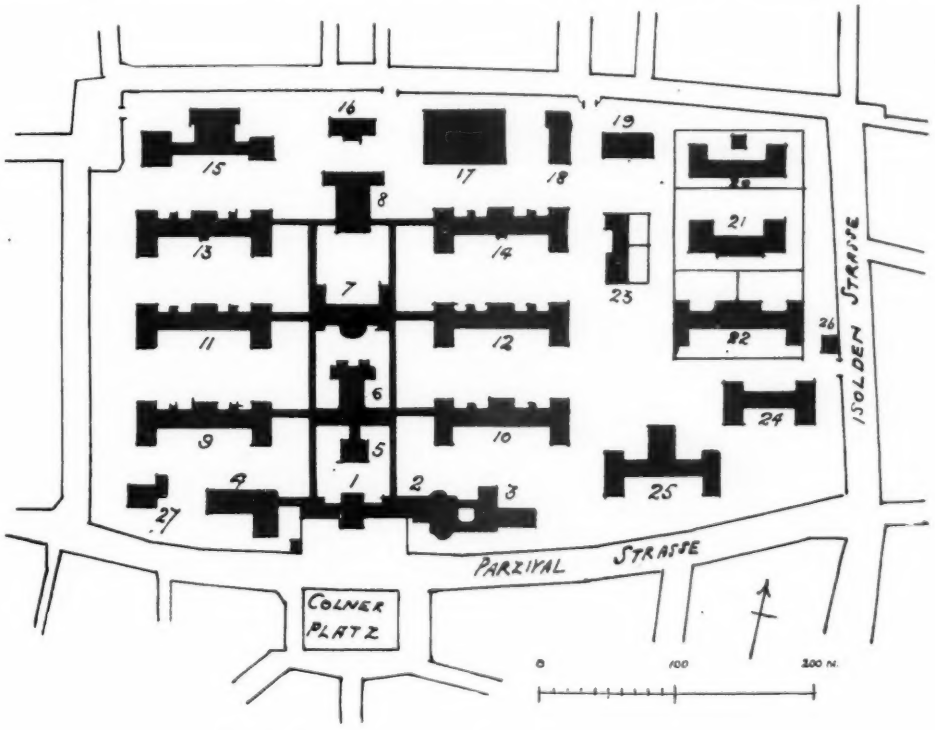


FIG. 8.—BLOCK PLAN OF THE THIRD HOSPITAL, MUNICH.

1, Administrative Block. 2, Chapel. 3, Nurses' Home. 4, Offices and Dispensary. 5, Ambulatorium (Out-patients). 6, Operation House. 7, Bath House. 8, Kitchen Block. 9, 10, Surgical Pavilions. 11, 12, 13, 14, Medical Pavilions. 15, Laundry and Disinfection Block. 16, Greenhouse. 17, Boiler and Engine House. 18, Workshops Block. 19, Pathological Institute. 20, Isolation Block. 21, Infectious Diseases Pavilion. 22, Skin and Venereal Diseases Pavilion. 23, Mental Diseases Pavilion. 24, Children's Pavilion. 25, Gynæcological Pavilion. 26, Lodge. 27, Director.

operation-house, bath-house, and kitchen block are principally of one story, the access of light and air is not interfered with. The boiler-house and laundry, the disinfection-house, and the pathological institute are detached blocks to the rear of the site; while in the eastern portion of the land, with separate access, detached blocks for skin and venereal diseases, infectious diseases, and isolation are provided, and separate pavilions for gynæcological cases, children, and mental diseases will be erected. This hospital when complete will accommodate some 1,300 patients, the portion now erected containing about 500 beds.

The new hospitals at Rixdorf and Mülhausen-i.-Els all show connecting corridors linking up their pavilions,

Such hospitals as the Royal Charité, Berlin, the City Hospital, Frankfort, or the General Hospital, Düsseldorf, with which is incorporated the Academy of Medicine, in which the blocks are all detached, are, as it were, a series of special hospitals, each under the control of its own professor and staff, with common administrative, admission, domestic, and technical blocks. In these hospitals the operating theatres are in the blocks containing the surgical department, and at Düsseldorf patients are conveyed to and from the bath-house in a subway.

The smaller hospitals and clinics, with an accommodation up to about 200 beds, are usually erected on the block system, with the patients', administrative, and domestic rooms in one block, and the technical rooms, boiler-house, and the mortuary in another block or blocks. Excellent examples of this type of plan are the Bürgerspital at Frankfort, the Jewish Hospital at Cologne, or the Royal Ophthalmic and the Royal Psychiatrical Clinics at Munich.

ADMINISTRATIVE BLOCKS.

The administrative blocks of the German hospitals usually form the principal frontage of the institutions, and are designed in a most practical manner. The great point, perhaps, which one notices is that the main entrance to the hospital is for patients, their entrance, as so often in England, not being to one side.

In hospitals erected in the pure pavilion style one finds the administrative block of a definite type, as at Eppendorf, Dresden Johannstadt, or Nuremberg [fig. 9]. In the centre of the ground floor is a large carriage-hall [fig. 10], often elaborately treated, through which the patients are conveyed in the ambulance-wagons to the doors of their respective pavilions, and which is also used on visiting days for the assembly of patients' friends. The main entrance is always under the control of the porter. In one wing of the ground floor is the receiving and admission department (in which there is always a doctor on duty for the reception of accidents, and in which all patients are examined and the admission formalities complied with), and the various administrative offices, such as the directors', clerks', and treasurers' offices, and the waiting and messengers' rooms. In the other wing is the dispensing department, comprising the dispensary, laboratories, drug-stores, and dispensers' apartments. On the first floor is the doctors' home, comprising recreation- and bed-rooms, and the meeting-room for the administrative body, while on the roof floor are the servants' rooms, and in the basement the porters' and male servants' apartments, and stores. The chapel is sometimes in the administrative block as at Nuremberg or Schöneberg (first floor), or it is sometimes detached as at Eppendorf or Düsseldorf.

There are, however, certain objections to this type of plan, notably a patient with an infectious disease may be introduced into the centre of the administrative block, and the reception of accidents is often a distressing sight. These objections are overcome at Charlottenburg West End, by placing the receiving and admission department in a one-story wing at one end of the block, with separate entrance, and balancing this at the opposite end by a similar wing containing the dispensing department.

At the Virchow Hospital, Berlin [figs. 11 and 12], the administrative block is planned round a courtyard. In the centre of the front, which is of one story, is the main entrance to the hospital through a carriage-hall, with to one side the offices, and to the other the receiving and admission department. Patients are completely examined here, except the serious cases, which are only quickly examined in the ambulance-wagon and then sent to their respective pavilions. The north side of the courtyard is formed by the three-story doctors' home, the south side by the nurses' home, and the remaining side by a three-story block, which with outshoots contains the maternity and gynæcological departments. In the centre of this block is a carriage-way to the hospital proper, and the principal staircase to the upper floor to the large assembly-hall and nurses' class-room. This plan enables a very fine architectural treat-

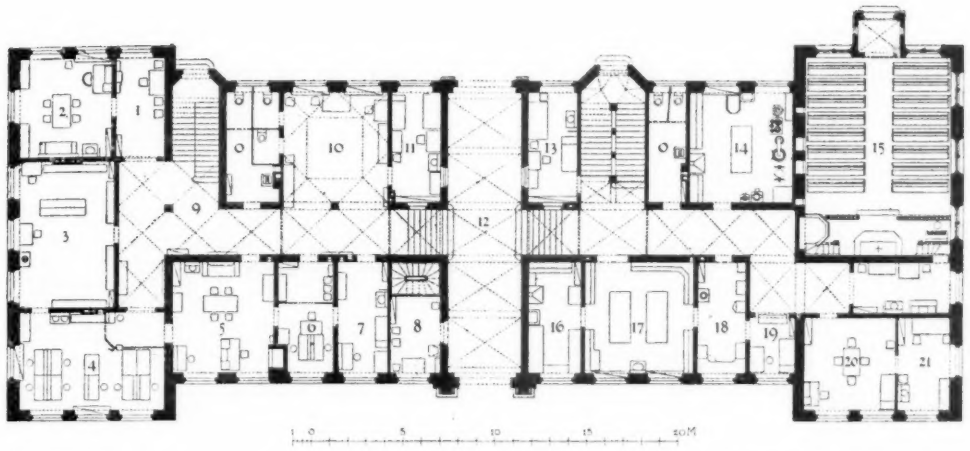


FIG. 9.—GROUND FLOOR PLAN OF THE ADMINISTRATIVE BLOCK, NUREMBERG.

1, 2, Medical Director. 3, 4, Administrative Offices. 5, Administrative Director. 6, Receiving Room. 7, Examination Room. 8, Porter. 10, Patients' Waiting Room. 11, Night Porter. 12, Carriage Hall. 14, 16, 17, 18, 19, Dispensary and Laboratories. 13, 20, 21 Dispensers' Apartments. 15, Chapel and Vestry.

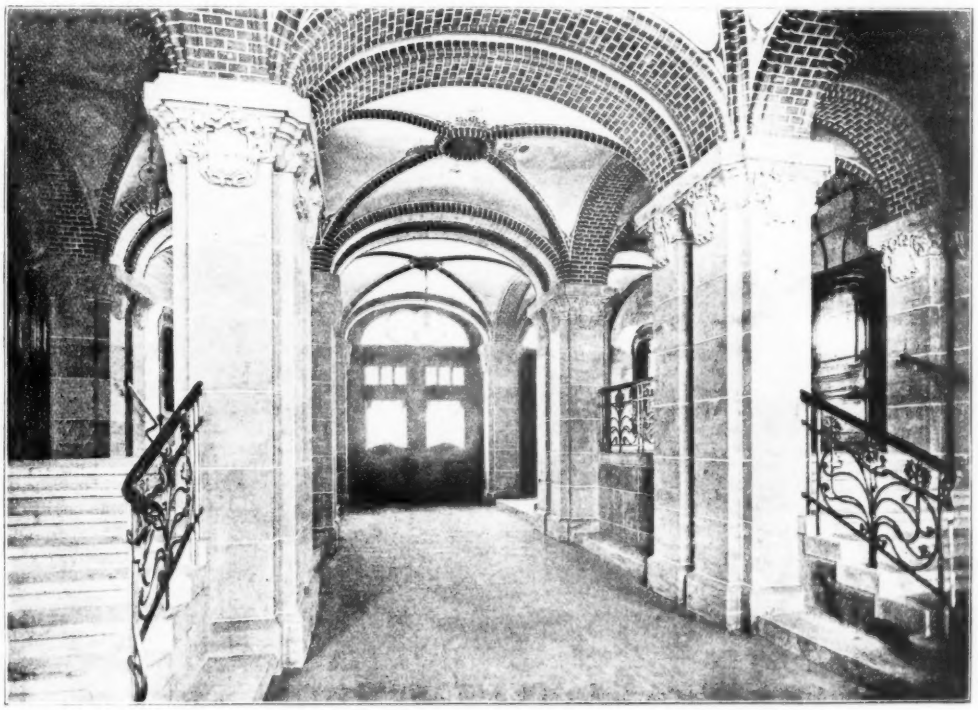


FIG. 10.—THE ENTRANCE HALL IN THE ADMINISTRATIVE BLOCK, DRESDEN JOHANNSTADT HOSPITAL.

ment to be given to the courtyard, but the planning of the maternity and gynæcological departments appears to have been somewhat influenced to suit this purpose. The doctors'

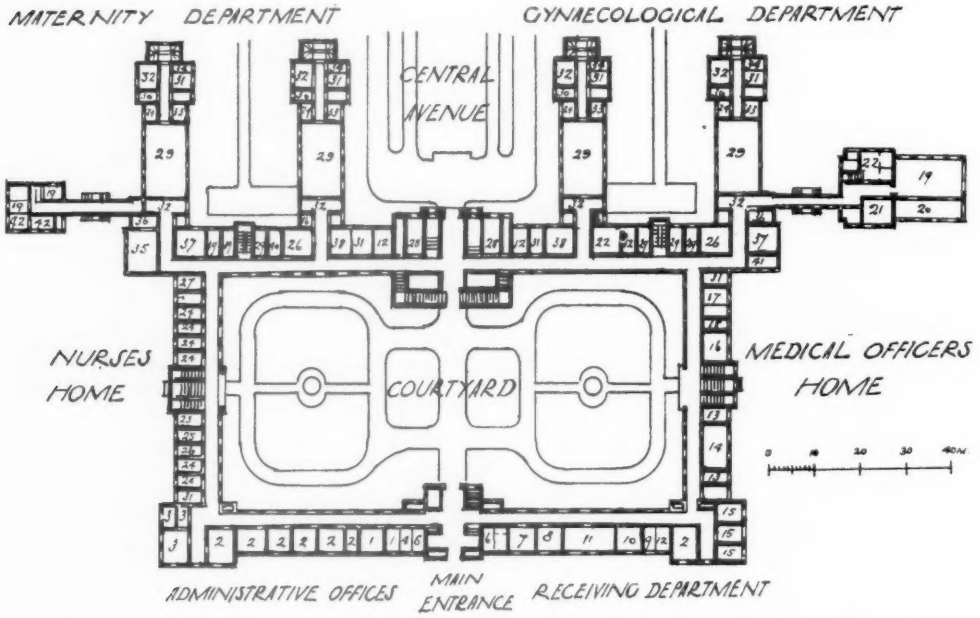


FIG. 11.—GROUND FLOOR PLAN OF THE ADMINISTRATIVE BLOCK, THE VIRCHOW HOSPITAL, BERLIN.

1, Administrative Director. 2, Office. 3, Treasurer. 4, Telephone Exchange. 5, Messenger. 6, Porter. 7, Men's Registration. 8, Men's Examination. 9, Women's Registration. 10, Women's Examination. 11, Waiting Room. 12, Attendant. 13, Director. 14, Committee Room. 15, Medical Officer. 16, Library. 17, Scientific Library. 18, Reading Room. 19, Dining Room. 20, Loggia. 21, Card Room. 22, Scullery. 23, Nurses' Examination. 24, Nurse. 25, Visitors. 26, Linen. 27, Dirty Linen. 28, Receiving Room. 29, Ward. 30, Lavatory. 31, Bath Room. 32, Day Room. 33, Apparatus. 34, Cleaner. 35, Labour Room. 36, Instruments. 37, Examination. 38, Doctors' Duty Room. 39, Head Nurse. 40, Nurse. 41, Anæsthetising Room. 42, Laboratory.

recreation-rooms are contained in a detached block to the north, which is balanced by a similar block to the south, originally intended to contain the septic cases of the maternity department.

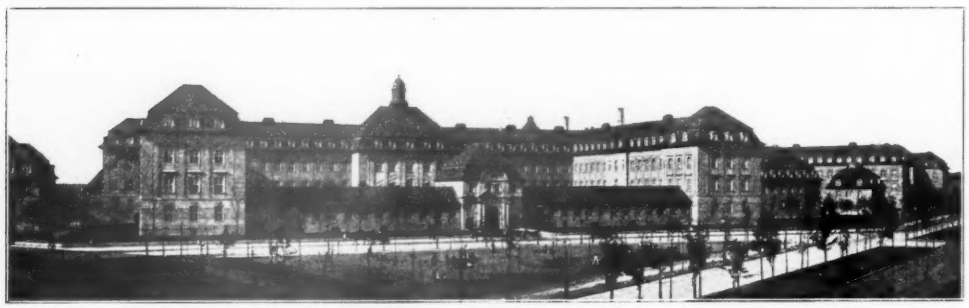


FIG. 12.—GENERAL VIEW OF THE ADMINISTRATIVE BLOCK, THE VIRCHOW HOSPITAL, BERLIN.

From the English point of view the most interesting administrative blocks are those of Cologne and Munich, as both these hospitals are planned on the corridor pavilion system. At

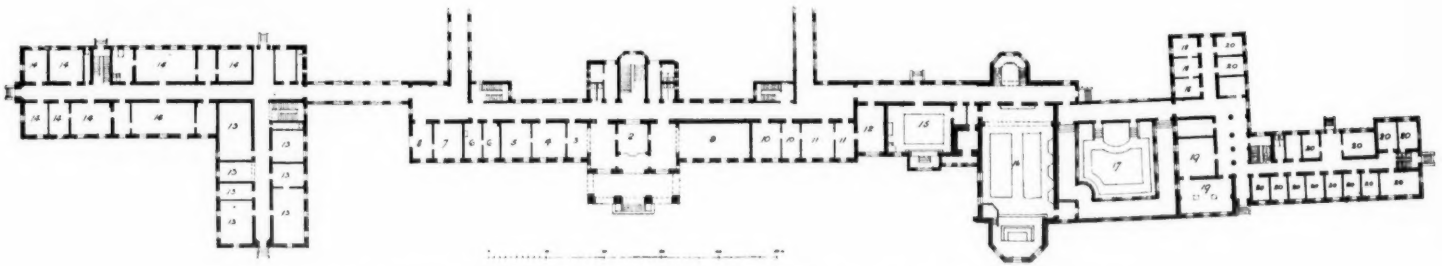


FIG. 13.—GROUND FLOOR PLAN OF THE ADMINISTRATIVE BLOCK, THE THIRD HOSPITAL, MUNICH.

1, Main Entrance. 2, Porter. 3, Patients' Waiting Room. 4, Registration Room. 5, Examination Room. 6, Matron. 7, Telephone Exchange. 8, Ambulance Entrance. 9, Waiting Room for Patients' Friends. 10, Head Medical Officer. 11, Director. 12, Committee Room. 13, Administrative and Accountants' Offices. 14, Dispensing Department. 15, Protestant Chapel. 16, Catholic Church. 17, Cloisters. 18, Home Sister. 19, Linen. 20, Nurses' Bedroom.

FIG. 14.—GENERAL VIEW OF THE ADMINISTRATIVE BLOCK, THE THIRD HOSPITAL, MUNICH.

Cologne the central block is of three stories providing the usual accommodation, with a central carriage-hall through which the ambulance-wagons can convey the patients to the door of each pavilion. A central corridor runs from north to south, to the south being the chapel and the nurses' home, so planned as to form a cloister between the two, as the nursing here is in the hands of a religious sisterhood. To the north, symmetrically planned, is the assembly-hall, and the three-story pavilion for the accommodation of private patients of the first and second classes.

At Munich III. the principal façade is again formed by the administrative and adjoining blocks [figs. 13 and 14]. In the centre of the main block is the carriage-porch, with porters', admission and examination rooms, and waiting-rooms for patients' friends on visiting days. The side entrance is for the reception of accident or acute cases in the ambulance-wagons. In this hospital the ambulance-wagon does not convey patients directly to the pavilions, they being conducted through the corridors by the attendant. On the upper floors are the doctors' and staff apartments. In a block to the east, and so separated from the receiving department, are the accountants' offices and the dispensary. To the west is the chapel, the Catholic church, and the nurses' home with cloister, the nursing here being again in the hands of a religious sisterhood, accommodation for 115 sisters being provided, while the remaining attendants and the domestic staff reside partly in the pavilions and partly in the kitchen and laundry blocks.

MEDICAL AND SURGICAL DEPARTMENTS.

In the medical and surgical departments similar developments can be traced in the design of the pavilions, from the Moabit type to the latest at Munich III., as have been traced in the development of the block plans.

At the Moabit Hospital, Berlin [fig. 15], the pavilions consist simply of a large ward for 30 beds, with, at the entrance end, opening from a central corridor, a nurses' room, ward kitchen, linen-room, bath-room, and water-closets. This type was further developed at Friedrichshain, Am Urban Berlin, Hamburg Eppendorf, and Nuremberg.

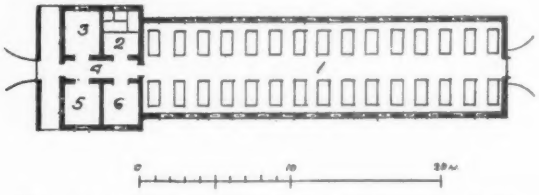


FIG. 15.—GROUND FLOOR PLAN OF PAVILION, THE MOABIT HOSPITAL, BERLIN.

1, Ward for thirty beds. 2, Bath and Water-closets. 3, Linen. 4, Corridor. 5, Nurse. 6, Ward Kitchen.

Fig. 16 shows one of the one-story pavilions at Nuremberg for medical or surgical cases. The long axis runs from north to south. The patients are brought in the ambulance-wagon to the entrance, adjoining which are the small wards and the nurses' rooms. These rooms are disconnected from the large ward by a cross-corridor, which contains a slop sink, linen and clothes cupboard, telephone, and alarm-bell indicator. The large ward contains 32 beds ranged on either side, there being in addition to the usual ward furnishings two fixed double marble lavatory basins for the doctors', nurses', and patients' use. At the opposite end of the large ward is the day-room, from which double doors lead to the grounds by a ramp down to facilitate the food-wagon service to the ward kitchen, which adjoins the day-room, as it is here that the convalescent patients take their meals. The sanitary rooms are also situated at this end and comprise the bath-room and the cross-ventilated water-closet-room, which contains four water-closets and a slop-sink. In the basement is a store-room, and the rooms for the heating and ventilating apparatus.

This type of plan for a detached pavilion has now been largely superseded by the type

introduced by Lenharz and Ruppel at Hamburg St. Georg in 1899, of which the Virchow pavilion is a development. Instead of providing one large ward for 32 beds, two wards each for about half that number are provided, the staff and service-rooms are placed in the centre, and the small wards and sanitary-rooms at each end.

The Virchow pavilions are all similar in design and are of one story with a two-story central block. The long axis runs from north to south and the length of the pavilion is 301 feet.

Fig. 17 shows a complete plan of the ground floor of one pavilion with all equipment. Patients enter at the centre through a small room, which contains the registration-desk, into the receiving-room, where they are undressed, examined, bathed, and dressed in hospital clothing, their own clothing being conveyed to the central clothes-store where it is kept until their discharge. Adjoining this room is an operation-room for minor operations and surgical dressings. The other rooms in the central block comprise the doctors' room for testing and laboratory work, the linen-store, the ward kitchen to which the food is brought to the service entrance and handed in through the hatch, the nurses' duty-room, dirty-linen disinfection-

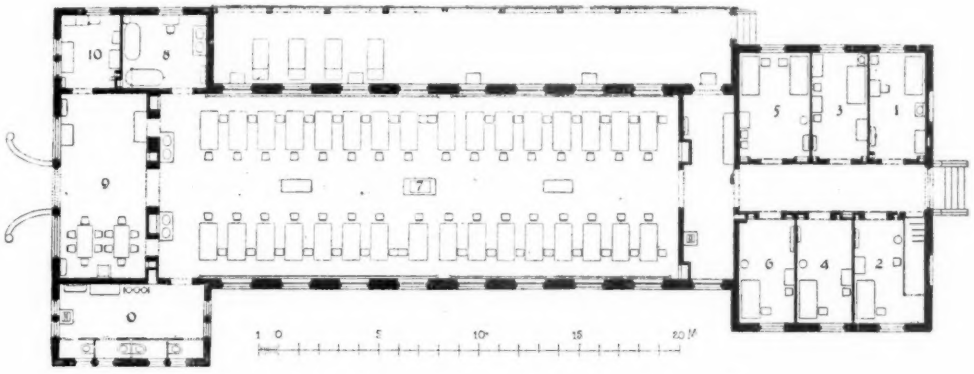


FIG. 16.—GROUND FLOOR PLAN OF PAVILION, NUREMBERG GENERAL HOSPITAL.

1, 4, 6, Single-Bed Wards. 5, Two-Bed Ward. 2, 3, Nurses' Rooms. 7, Ward for thirty-two beds. 8, Bath Room. 9, Day Room. 10, Ward Kitchen. 0, Water-closets and Sink Room.

room, day-room, and staff lavatory. The large wards [fig. 18], which each contain 20 beds, are disconnected from the central block by cross-corridors, which give access to the terraces. It will be noted that by means of the through and cross-corridors the whole or any portion of the pavilion can be thoroughly ventilated. In the end blocks are two-bed and single-bed wards, the lavatory with three basins, bath-room with two baths, douche spray, and two sitz-baths, two water-closets, and the sink-room.

On the first and roof floors of the central block are the apartments for the staff of each pavilion, medical, nursing, and domestic, and in the basement the heating and ventilating-rooms.

In spite of the care which has been exercised in the planning of these pavilions their design has been much criticised, particularly with regard to their great length, the number of small rooms, the distance of the small wards from the service-rooms, the curved form of the ceiling in the large wards and the smallness of the windows.

Of greatest interest from the English point of view are those hospitals in which the pavilions are united by connecting corridors.

Fig. 19 shows the two pavilions for men in the surgical department at the West End

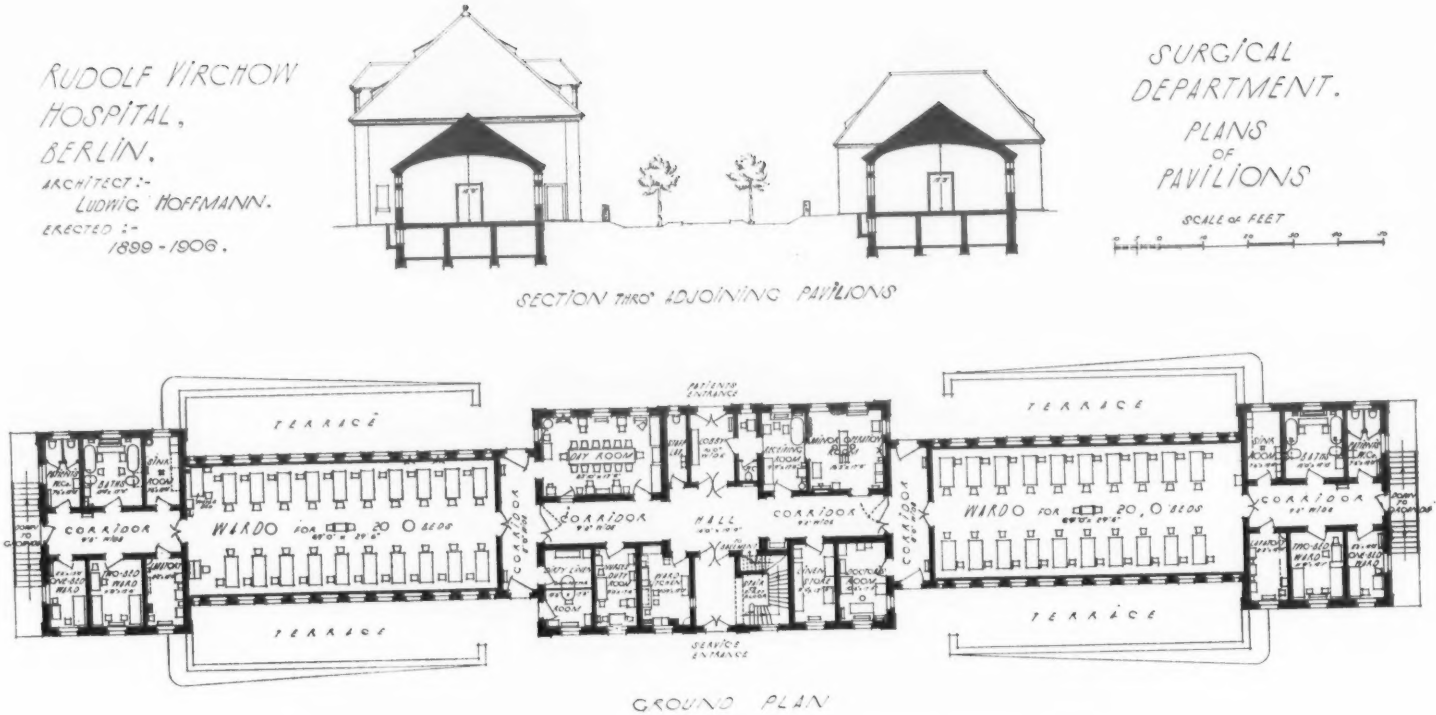


FIG. 17.—GROUND FLOOR PLAN OF SURGICAL PAVILION, THE VIRCHOW HOSPITAL, BERLIN.

Hospital, Charlottenburg. The one-story block between the pavilions contains the receiving-rooms, to which all patients are brought, the laboratories for the two pavilions, and the day-room for the smaller pavilion. All patients are here examined, bathed, dressed in hospital clothing, and then conveyed to their ward.

The pavilions are of two stories of wards, with an upper floor to the front containing the apartments for the doctors and male attendants, and a similar floor to the rear containing the apartments for the nursing staff of each pavilion. The various series of rooms on each ward-floor are separated one from another by cross-ventilated corridors. To the front, adjoining the main entrance and staircase, are the staff and service rooms, comprising the doctors' and

FIG. 18.—WARD FOR TWENTY BEDS, THE VIRCHOW HOSPITAL, BERLIN.

nurses' duty-room, linen-store, ward kitchen, to the window of which the food is brought, and scullery; in the centre is the large ward for 22 beds, with the bath-room and lavatory adjoining; to the rear are two three-bedded wards, a single-bed ward, and bandaging and sterilising-rooms; while the rooms common to both sets of wards are placed between them, and comprise a large day-room, the water-closets, and sink and disinfecting-rooms, with provision in the latter for sterilising the fæces before discharge into the drains, and for disinfecting the dirty linen before its conveyance to the laundry.

The smaller pavilion is similar in detail to the larger, except that the large ward contains 16 beds only, while some of the rooms are rearranged owing to the omission of the rear block so as not to interfere with the lighting and ventilation of the operation-house.

At Cologne Lindenburg [fig. 20] the corridor type of pavilion is approached, the large

ward, which in five of the pavilions contains 14 beds and in the remaining three 20 beds, only taking up a small proportion of the total length. The pavilions are of two stories of wards, with the doctors' apartments and clothes-stores on the second floor. At the entrance, adjoining the main staircase and bed-lift, is the receiving bath-room, in which all new patients are bathed before admission to the wards. This receiving bath-room only occurs on the ground floor, its place being taken on the first floor by a small isolation department for two beds. The small wards are for one, two, and six beds respectively, between them and the large ward

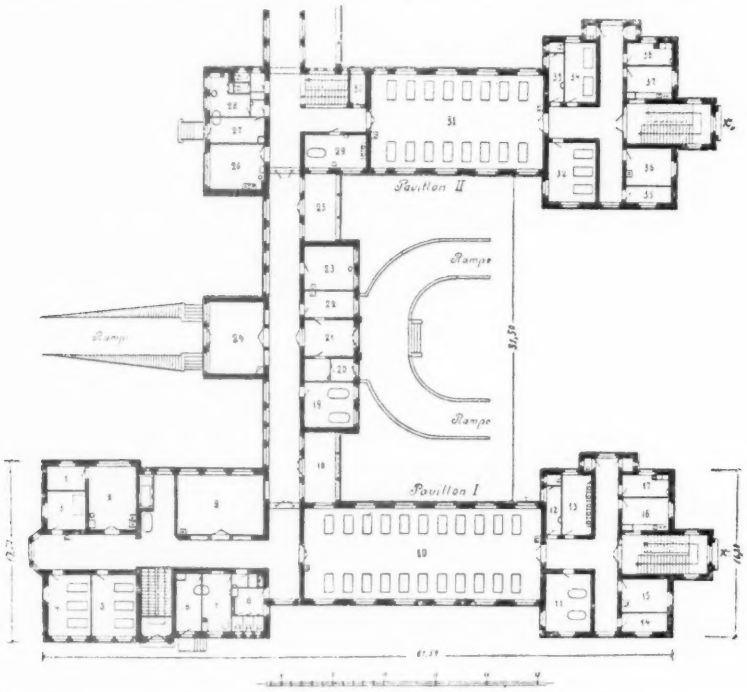


FIG. 19.—GROUND FLOOR PLAN OF PAVILIONS I. AND II. OF THE SURGICAL DEPARTMENT, CHARLOTTENBURG WEST END HOSPITAL.

PAVILION I.—1, Sterilising Room. 2, Minor Operations. 3, Single-Bed Ward. 4, 5, Three-Bed Wards. 6, 7, Disinfecting and Sink Room. 8, Patients' Water-closets. 9, Day Room. 10, Ward for twenty-two beds. 11, Bath Room. 12, Cleaner and Staff Water-closet. 13, Patients' Lavatory. 14, Linen. 15, Duty Room. 16, Ward Kitchen. 17, Scullery.

RECEIVING BLOCK.—19, Receiving Bath Room. 20, Undressing Room. 21, Entrance and Waiting Room. 22, Nurse. 23, Laboratory for Pavilions I. and II. 24, Day Room for Pavilion II. 18, 25, Verandahs.

PAVILION II.—26, Minor Operations. 27, 28, Disinfecting and Sink Room. 29, Bath and Lavatory. 30, Sterilising Room. 31, Ward for sixteen beds. 32, Three-Bed Ward. 33, Cleaner and Staff Water-closet. 34, Two-Bed Ward. 35, Linen. 36, Duty Room. 37, Ward Kitchen. 38, Scullery.

being the doctors' room for bandaging in the surgical department and for laboratory work in the medical, linen-store, day-room, nurses' and attendants' rooms, bath-room, and water-closets, and the ward kitchen, the food being brought to the latter from outside. It will be seen that the central corridor is well lighted and ventilated from open verandahs on both sides. The large ward contains in a recess four lavatory basins for the patients' use and at the entrance end a basin for the use of the doctor.

At Munich III. [fig. 21] the design of the pavilions of the medical and surgical departments is of the greatest interest, the corridor type of plan being fully developed. Each

pavilion is of three stories of wards and is disconnected from the main corridor by a cut-off corridor some 100 feet long. All patients' rooms face due south and open from a corridor 10 feet wide. At the entrance to each pavilion is a receiving department comprising undressing, bath, and dressing rooms, through which all new patients pass. The wards on each floor comprise two for twelve beds, one for six beds, two for four beds, two for three beds, three for

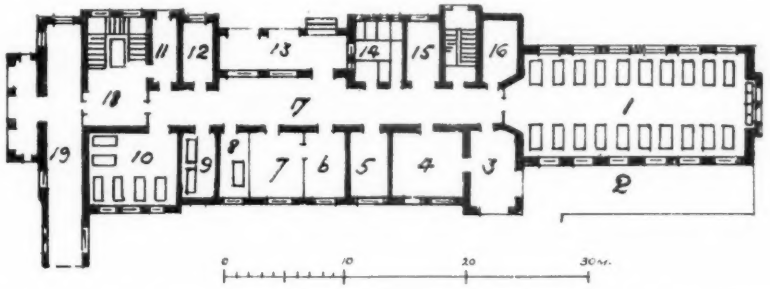
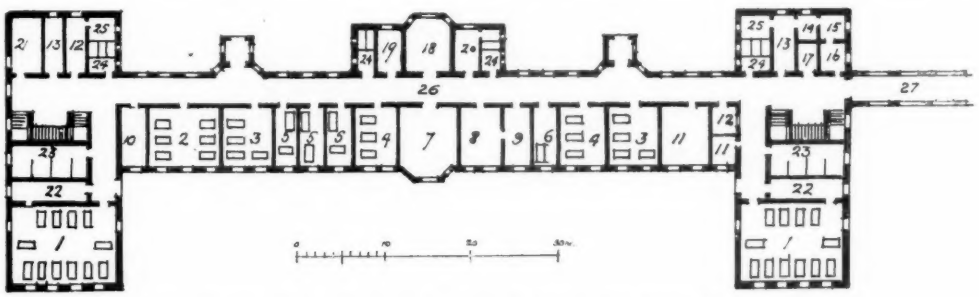


FIG. 20.—GROUND FLOOR PLAN OF SURGICAL PAVILION, THE LINDENBURG HOSPITAL, COLOGNE.

1, Ward for twenty beds. 2, Terrace. 3, 13, Verandah. 4, Day Room. 5, Bath Room. 6, Linen. 7, Bandaging Room. 8, One-Bed Ward. 9, Two-Bed Ward. 10, Six-Bed Ward. 11, Receiving Bathroom. 12, 16, Nurses' Room. 14, Water-closets and Sink Room. 15, Ward Kitchen. 17, Corridor. 18, Staircase. 19, Main Corridor.

two beds, and one single bed, each pavilion thus containing some 150 patients. The remaining rooms comprise a central day-room, ward kitchen and scullery, head-doctors' room, store-room, attendants' room with two beds, bath-rooms, and lavatories. In the central block to the north is a bandaging-room, a laboratory, dirty-linen room, nurses', staff and patients' water-closets, and in the blocks at either end a ward for permanent baths, sink-rooms with faeces disinfectors, patients' water-closets, and a store-room.

Thus a remarkable development has been traced from the one-story Moabit pavilion 1872 of the pure pavilion type with one large ward for 30 beds and four small adjoining rooms, to



[1]FIG. 21.—GROUND FLOOR PLAN OF SURGICAL PAVILION, THE THIRD HOSPITAL, MUNICH.

1, Twelve-Bed Ward. 2, Six-Bed Ward. 3, Four-Bed Ward. 4, Three-Bed Ward. 5, Two-Bed Ward. 6, Single-Bed Ward. 7, Day Room. 8, Ward Kitchen. 9, Scullery. 10, Nurses' Room. 11, Head Surgeon. 12, Cleaner. 13, Linen Store. 14, 15, 16, Receiving Bath Room, Dressing and Undressing Rooms. 17, Bed Lift. 18, Minor Operation Room. 19, Laboratory. 20, Dirty Linen Room. 21, Permanent Bath Room. 22, Lavatory. 23, Bath Room. 24, Water-closets. 25, Sink Room. 26, Corridor. 27, Cut-off Corridor.

the latest three-story pavilion at Munich III. of the corridor pavilion type, where the number of rooms is greatly increased, and the wards contain a maximum number of twelve beds, the majority containing six beds and under. It is considered possible that this reduction in the number of beds per ward will continue until in the next fifteen years or so the maximum number per ward will be ten beds or thereabouts, as it permits of a thorough classification of

the diseases and patients, rendering them much easier to nurse and control, while at the same time the individuality of the single patients can be much better looked after.

INFECTIOUS DISEASES DEPARTMENTS.

Separate hospitals for infectious diseases as in England are not found in Germany, but a special department is provided in the general hospital. The pavilions are grouped together and are separated by a zone from the rest of the hospital, while a separate entrance to the department is usually provided.

At the Eppendorf Hospital, Hamburg, in 1905-07, a very complete infectious diseases department [fig. 2, Infections-Abteilung] with a total accommodation of 200 beds was erected on the triangular portion of the site to the rear of the tuberculosis department, originally occupied by the epidemic department. It comprises seven detached pavilions of varying sizes, each with its own garden surrounded by a high wire-netting fence. Pavilion No. 56 is for scarlet fever, No. 58 for scarlet fever-diphtheria, No. 61 for diphtheria, No. 60 for measles, No. 65 for isolation, No. 62 for whooping-cough, while No. 63 on the outlying portion of the

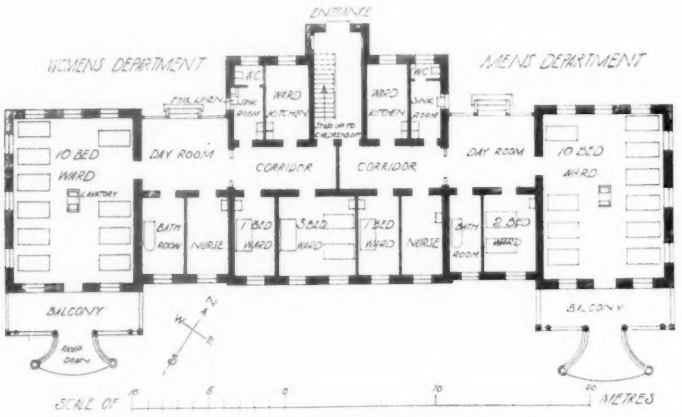


FIG. 22.—GROUND FLOOR PLAN OF SCARLET FEVER PAVILION, EPPENDORF HOSPITAL, HAMBURG.

site is the quarantine pavilion. The nursing and domestic staff have their living and sleeping apartments in their respective pavilions.

The quarantine pavilion is of one-story and comprises three entirely separate departments with separate entrances, each containing three- and single-bed wards, with day, nurses', and sanitary-rooms attached.

The scarlet fever pavilion [fig. 22] is of two stories of wards and contains 59 beds, 13 for men, 14 for women, and 32 for children, on the second floor being the apartments for the nursing and domestic staff of the pavilion. As the plan shows, the ground floor is centrally divided into men's and women's sides, all wards facing south-east. The accommodation on each side comprises ten-, two-, and single-bed wards, day-room, nurses' room, ward kitchen, and sanitary-rooms. The first floor provides accommodation for children and is of the same type as the ground floor except that the central division is omitted.

The remaining pavilions of the department are of a similar type of plan, they being all of one story, with the exception of the diphtheria pavilion which is of two stories of wards. The maximum number of beds per ward is twelve, which is found in the measles pavilion.

At the Virchow Hospital, Berlin, the infectious diseases department is under the

control of the Royal Institute for Infectious Diseases, which is situated on the opposite side of the Föhrer Strasse, while a separate entrance from this street affords access to the department for those patients in whom the disease has already been recognised. The department comprises six detached one-story pavilions, each with a separate railed garden, symmetrically placed about the transverse axis of the hospital plan, the total normal accommodation being 138 beds, which can, however, be increased to 180 beds when occasion demands. No. 17 [fig. 3] is the quarantine pavilion, No. 18 is for diphtheria, No. 19 to the south is for typhoid fever and the rarer infectious diseases, such as small-pox, cholera, plague, etc., No. 19 to the north is for measles in one half and for erysipelas (men) in the other, No. 20 to the south is for whooping-cough in one half and for erysipelas (women and children) in the other, No. 20 to the north is for scarlet fever, while No. 21 is a special autopsy block for the department for research work.

The quarantine pavilion for the observation of doubtful cases, etc., is centrally divided for men and women, and is of the side corridor type of plan, with all wards facing south and the sanitary-rooms in outshoots to the north. The wards are for two and single beds, and the apartments for the staff of the pavilion are provided on the first floor with access from outside only.

The diphtheria pavilion with 28 beds is of a similar type of plan, the wards containing four, two, and one beds.

The four pavilions Nos. 19 and 20 are all of similar type, each containing 22 beds. They are centrally divided on the ground floor [fig. 23], each department containing five-, three-, two-, and single-bed wards, day and operation-rooms opening from a central corridor, while the ward kitchen, nurses' duty-room, dirty-linen disinfection-room, bath-room, sink-room which contains a fæces disinfector and the water-closets, are disconnected from the wards by a cross-ventilated corridor. On the first floor of each pavilion are the apartments of the medical, nursing, and domestic staffs, only accessible by outside stairs.

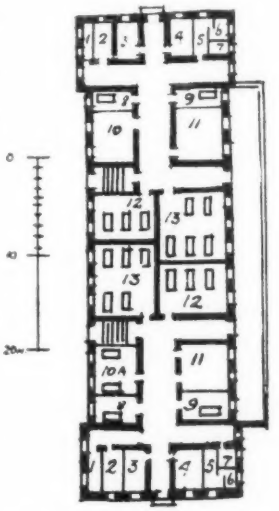


FIG. 23.—GROUND FLOOR PLAN OF PAVILION FOR INFECTIOUS DISEASES, THE VIRCHOW HOSPITAL, BERLIN.

1, Staff Lavatory. 2, Dirty Linen Disinfection Room. 3, Nurses' Duty Room. 4, Ward Kitchen. 5, Bath Room. 6, Sink Room. 7, Patients' Water Closet. 8, 9, Single-Bed Ward. 10, Operating Theatre. 10a, Two-Bed Ward. 11, Day Room. 12, Three-Bed Ward. 13 Five-Bed Ward.

At Charlottenburg West End, the infectious diseases department [fig. 5] comprises six detached one-story pavilions, placed one behind the other, adjoining the north-western boundary of the site. No. XI. is the diphtheria pavilion for 30 women and children, Nos. XII. and XIII. of the surgical department provide accommodation for 24 men, and 26 women and children respectively, and Nos. XIV., XV., and XVI. of the medical department provide accommodation for 22 men, 28 women and children, and 28 women and children, respectively.

The pavilions [fig. 24] are centrally divided into two similar departments and are of the corridor type of plan, all wards facing south-west, and comprising in each department four, three, and two two-bedded wards. Patients enter by a glazed entrance-hall through the bath-room, where they are undressed, bathed, and dressed in hospital clothing. Doctors and nurses enter from either end through a vestibule, which contains provision for the disinfection of the hands and the changing of gowns. The ward kitchen with receiving window to outside for the delivery of the food opens from the vestibule so as to be as detached as possible from the wards. Adjoining the day-room is the doctors' and nurses' duty-room, and the operation-room for septic cases, the dressings sterilisers for the latter being placed in the vestibule. The sanitary-rooms are grouped together in the central outshoot, and comprise patients' and staff

water-closets, a small room for urine and sputum examination, the sink-room which contains a cupboard for the retention of fæces etc., a slop-sink disinfector for the disinfection of the contents of bed-pans before discharge into the drains, a wash-up sink, and the dirty-linen disinfector which opens into a sorting-room with direct access to outside for the conveyance of the disinfected linen to the laundry. On the central first floor of each block are the apartments for the staff of each pavilion. Attached to the disinfection-house is a small discharge department, comprising undressing-, bath-, and dressing-rooms, for patients on discharge from this department.

In those hospitals where the site does not permit of the erection of a number of one-story blocks, each for a different infectious disease, it is usual to erect one or more large blocks of

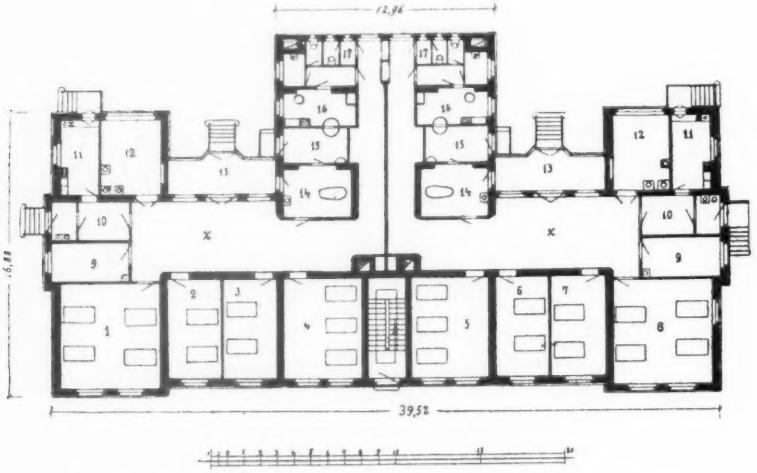


FIG. 24.—GROUND FLOOR PLAN OF PAVILION FOR INFECTIOUS DISEASES, THE WEST END HOSPITAL, CHARLOTTENBURG

1, 8, Four-Bed Wards. 2, 3, 6, 7, Two-Bed Wards. 4, 5, Three-Bed Wards. 9, Doctor and Nurses' Duty Room. 10, Vestibule. 11, Ward Kitchen. 12, Operation and Bandaging Room. 13, Covered Entrance Hall for Patients. 14, Bath Room and Lavatory. 15, Disinfecting and Linen Sorting Room. 16, Disinfecting and Sink Room. 17, Patients' Water Closet.

more than one story, separated horizontally by the floors and vertically by partition-walls into separate departments for different diseases, each department having a separate entrance.

At Düsseldorf the infectious diseases pavilion is of three stories of the corridor type of plan. The ground floor is centrally divided into two departments, one for scarlet fever, the other for measles. The first floor, reached by a separate staircase, contains the department for diphtheria, and the second floor again, reached by a separate stair, contains the department for surgical infectious diseases. On the third floor are the apartments for the medical and nursing staff of the pavilion.

At Munich III. the infectious diseases pavilion is of two stories, and contains 55 beds in wards of from one to four beds in four completely separated departments, for measles, diphtheria, scarlet fever, and erysipelas respectively, each department having a separate entrance.

At Dresden Johannstadt there are two large three-story pavilions for infectious diseases, each centrally divided into two departments for different diseases, and by their floors for men, women, and children respectively. One pavilion contains in one department diphtheria, in the other scarlet fever, while the other pavilion contains measles in one department and the

ophthalmic department temporarily in the other. On the roof floor are the staff apartments, and accommodation for the relatives of sick children.

In the majority of diphtheria pavilions special wards are provided, which can be used as steam-rooms, as for example at Dresden Johannstadt, where the walls and floor are tiled, and the ceiling double and of arched form, so as to prevent the condensed water dropping on the patient. Fully equipped operating theatres again are usually provided in the pavilions for tracheotomy.

A special observation pavilion, of considerable interest, is found in the Düsseldorf General Hospital, where all patients with infectious diseases are received and examined, four separate departments, each comprising a ward for two beds, bath-room, water-closet, and separate entrance, being provided for doubtful cases.

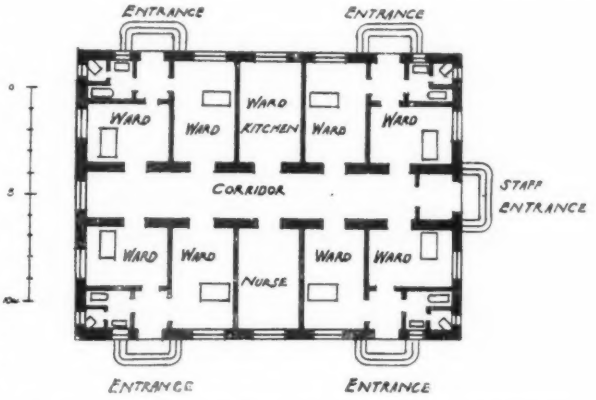


FIG. 25.—GROUND FLOOR PLAN OF THE CHILDREN'S QUARANTINE PAVILION, THE ROYAL CHARITÉ HOSPITAL, BERLIN.

The children's quarantine pavilion [fig. 25] at the Royal Charité Hospital, Berlin, shows a similar type of building with four separate departments, each with two single-bed wards, bath, and water-closet, and separate entrance, and a common ward kitchen and nurses' room, the central corridor being for the use of the medical and nursing staff only.

PRIVATE PATIENTS' PAVILIONS.

The majority of the general hospitals provide special accommodation for private patients, who pay a larger sum per day than ordinary patients, the wards containing one or two beds and being elaborately appointed. A special pavilion is usually provided for this purpose, with its own grounds and gardens. The normal type of plan consists of the series of wards lying to the south of a long corridor, while the service, treatment, and sanitary-rooms are in outshoots to the north, as at Hamburg Eppendorf and St. Georg, Nuremberg, Schöneberg, etc. At Cologne Lindenberg the pavilion is connected to the administrative block, the ground floor being for surgical cases, and the upper floors for medical. The pavilions always contain fully equipped operation-rooms and treatment-rooms.

CHILDREN'S DEPARTMENTS.

In some of the older hospitals the pavilions for children are of the same type as those of the medical and surgical departments, but in the more recent hospitals special pavilions are generally erected.

At Düsseldorf the Children's Clinic is particularly good. At the entrance is a small isolation department for four beds, so as to allow of the observation of doubtful cases and prevent the introduction of infection. The ground floor is for infants, and comprises four wards each with ten cots. In an outshoot is a most interesting department [fig. 26] of heated isolation-rooms for prematurely-born and weakly children. It comprises six cells or boxes, each for two cots, constructed in the lower portion of marble and in the upper of two thicknesses of plate-glass in nickel-plated steel frames. The elaborate apparatus for controlling

the temperature, the degree of humidity, and the ventilation of each cell, is controlled from the central corridor. Each child has its own feeding and other utensils in glazed compart-

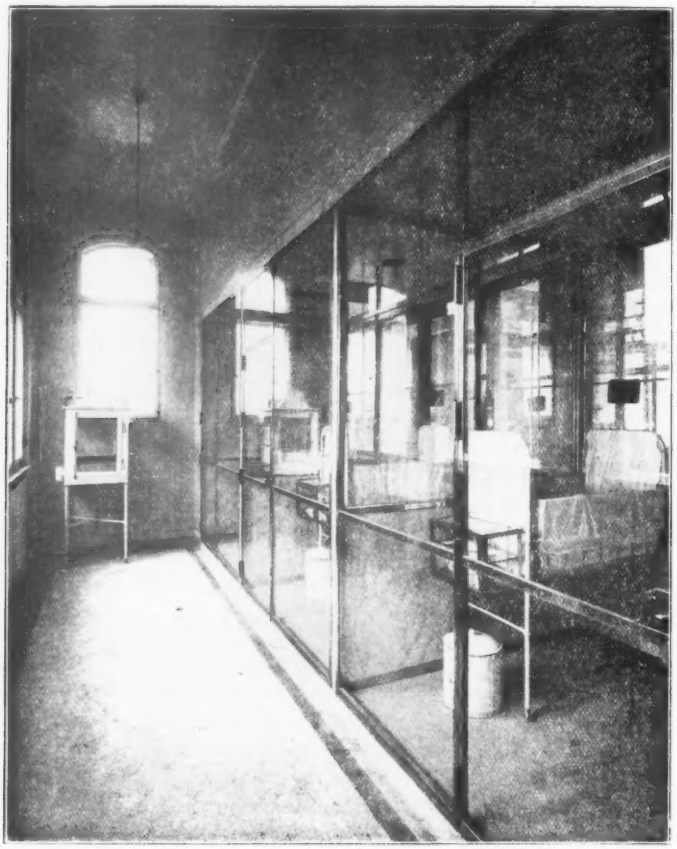


Fig. 26.—The Isolation Department, the Children's Clinic, Düsseldorf General Hospital.

ments attached to the end of each bed. The first floor of the Clinic contains the wards for the older children, the basement a very fine milk-kitchen, with adjoining rooms, while in an outshoot are the laboratories of the Clinic, lecture-theatre, and library.

(To be continued.)

9 CONDUIT STREET, LONDON, W., 25*th Nov.* 1911.

CHRONICLE.

Mr. Statham's Paper.

The Paper by Mr. Statham on French Sculpture drew a large and appreciative audience to the Institute last Monday. The paper was a particularly attractive one, and though it took a full hour and a half in delivery the lecturer held the interest of his audience to the end. The illustrations comprised over a hundred slides specially prepared for the occasion, the larger number from photographs very kindly supplied by the eminent artists whose works were under criticism. Two interesting speeches from Sir Wm. Goscombe John, R.A., and Professor W. Robert Colton, A.R.A., followed, and the meeting passed a very cordial vote of thanks to Mr. Statham for his lecture and (on the motion of the President) for the trouble he had taken in bringing together so large and unique a collection of illustrations. The Paper and discussion, with a selection of the illustrations, will appear in the next issue of the JOURNAL.

The New British School at Rome.

It was announced at the annual meeting of subscribers to the British School at Rome, which was held last Tuesday in Burlington House, that, with the aid of the Royal Commissioners of the Exhibition of 1851, a scheme had been arranged for incorporating the School in a larger and more comprehensive institution, which would secure for the British nation a worthy home for the study of the Arts, Archæology, and Letters in Rome. In the room of the Society of Antiquaries, where the meeting took place, a selection of architectural and other drawings by students of the School was on view. Should the scheme for an enlarged and reconstructed school in Rome go forward, it is intended to have an annual exhibition of greater interest and importance.

Professor J. S. Reid (Chairman of the Managing Committee) presided, and the following letter, dated 15th November, was read from Lord Esher, Chairman of the Board of Management, Royal Commissioners of the Exhibition of 1851 :—

DEAR PROFESSOR REID,—Although, as you are aware, nothing definite has as yet been settled with regard to the scheme for the establishment of the new British School at Rome, I think that the time has come when it would be well to make some kind of pronouncement on the subject, and I feel that the members of your body should be the first to hear of the developments of the scheme so far as it has gone I have, therefore, prepared a Memorandum which, if communicated to your members at their annual meeting on the 21st inst., would, I think, indicate fairly clearly to them the development and nature of the scheme which the 1851 Commissioners are formulating with the assistance of your body and of others interested in the artistic side of the proposals.

I sincerely hope that it will not be long before we obtain from his Majesty a Royal Charter of Incorporation for the new institution, when we may regard its establishment as an accomplished fact and look forward to the great results that are eagerly anticipated by all who are interested in the higher education of the country. So long as you make it clear to your subscribers that the scheme as outlined in my Memorandum is still under the consideration of the various authorities concerned, I do not see any reason why the facts of the case should be any longer treated with reserve.

Lord Esher's Memorandum is as follows:—

DEVELOPMENT AND NATURE OF THE SCHEME.

In the early part of the year (1911) the Royal Commissioners for the Exhibition of 1851 resolved to establish a system of travelling scholarships in Architecture, Sculpture, and Decorative Painting on lines somewhat similar to those of the French Prix de Rome, and in the course of their inquiries they were advised to make the scholarships tenable in Rome. They accordingly approached the Archæological Institution, known as the British School at Rome, and arrangements were about to be made with that body for providing facilities for the Commissioners' scholars during their residence in Rome, when information was received that the site of the British Pavilion, erected from the design of Mr. Lutyens for the International Exhibition of Rome, had been offered by the Italian municipal authorities to Sir Rennell Rodd, the British Ambassador, to be used for the purposes of a British Institution of national interest.

ACQUISITION OF THE BRITISH PAVILION.

The Commissioners saw an opportunity not only of acquiring a building for the use of their scholars, but also of rendering a substantial service to the higher education of this country. Accordingly, with the concurrence of the British School at Rome, they intimated to Sir Rennell Rodd that if the site in question were made over to them they would be willing to purchase and adapt the building for the purposes of an enlarged British School at Rome, which should be made thoroughly representative of Art as well as Archæology. Sir Rennell Rodd, who had in the first instance offered the site to the British School at Rome, subsequently, with their concurrence, made arrangements with the Italian Government for the transfer of the site to three nominees of the Crown—namely, Prince Arthur of Connaught, President of the Royal Commission, Lord Esher, Chairman of the Executive, and himself, Sir Rennell Rodd. Shortly afterwards Colonel Charlton Humphreys, the head of the firm of contractors who built the pavilion, and to whom it will revert at the close of the Exhibition, generously undertook to present the building to the Commissioners. Thereupon the Commissioners, with the co-operation of the British School at Rome, who throughout had acted in a liberal spirit, showing a due sense of the public interests involved, approached various

bodies interested in Art, notably the Royal Academy, the Royal Institute of British Architects, and the Royal Society of British Sculptors, with a view to enlisting their support in the scheme, and, being met with favourable replies, proceeded to the work of drawing up a draft Constitution for the new British School.

The Objects of the New School.

The object of the Commissioners in taking a leading part in the establishment of the new School is to secure the institution from sectional control. While they desire that the artistic and archæological interests of the School should be managed by experts, they consider it essential that the general control of the School should be in the hands of a committee comprising a sufficient proportion of laymen along with representatives of these interests. The full details of the Constitution are not yet completed, as the desirability of drawing into the scheme various bodies other than those already mentioned (as well as individuals who, though not themselves artists, are immediately interested in artistic education) has made the work of adjustment and division of labour within the Constitution a long one.

As to the objects of the new School, it is intended to provide a centre in Rome where advanced students of Art and Letters may carry further those studies on which they have been engaged in the art schools and Universities of this country. Existing scholarships in Art enable a student to travel abroad for a short time and gain what inspiration he can from brief periods of study in the great art centres of the world. But it is of the greatest importance that a student should be able, by prolonged study in the atmosphere of a great art centre, to gain a thorough knowledge of the principles underlying the work of the great masters, and by that means to prepare himself for original work in the domain of art he has chosen. Such an opportunity for study and research in Archæology and History is already present in the existing institution at Rome, and the union of these two forces—Art and Letters—is not the least important feature of the new scheme. It is essential that some measure of guidance and supervision should be available for the students during their residence abroad, and it is the object of the School to meet these needs rather than to be in any sense a teaching institution.

The Commissioners propose to award three scholarships annually, one in Architecture, one in Sculpture, and one in Decorative Painting, and as the scholarships will ordinarily be tenable from two to three years, there will be from six to nine scholars of the Commission always in residence. The School will, however, have accommodation for students holding scholarships in the gift of the Royal Academy and the Royal Institute of British Architects and other bodies, as well as for students of Art and Archæology pursuing their researches in and about Rome.

Provision of a Hostel.

The Commissioners believe that a hostel is an essential part of the scheme. Living in Rome has of recent years become more expensive for young students working alone, and it was one of the objects of the Commissioners in promoting the scheme to relieve their scholars from material worries of any kind. The living accommodation at the hostel will be necessarily limited, but it is anticipated that the studio, library, and other working accommodation of the building will be sufficient for as many students of Art and Archæology as may be expected to make use of it.

The first Director of the new School will be Dr. Thomas Ashby, the Director of the present British School at Rome, and Mrs. Arthur Strong will, it is hoped, continue to give her valuable services to the School as Assistant-Director under the Faculty of Archæology. It is proposed to enlist the services of eminent artists who may be able to pay occasional visits to the School in order to assist and advise the Art students as occasion arises; but from the nature of the work and the high standard laid down for the scholarships it is not at present considered necessary to provide for the permanent retention of an artist's services in the School.

Tentative Forecast of the Organisation of the School.

The supreme control of the institution will be vested in a Council consisting of about 30 members, including representatives of the Royal Academy, Royal Institute of British Architects, and Royal Society of British Sculptors, archæological representatives of the existing British School at Rome, representatives of other bodies, and also individuals likely to be specially interested in the scheme. It is proposed that a small Executive Committee appointed by the Council should undertake the general control of the School, and that the purely artistic and archæological work should be organised and supervised by committees of experts forming the Faculties of Art and Archæology. The members of these faculties will be selected for their fitness for the work to be performed without any regard to the official positions they occupy. The intention is to form a Faculty of Art that will gain the confidence and support of the artistic world as a whole, while a like result is expected in the Archæological Faculty, the members of which are appointed by the subscribers to the existing British School at Rome.

Duties of the Executive Committee.

A precise definition of the duties of the Executive Committee and its relation to other bodies is difficult to put on paper at this stage. It is assumed, however, that the Executive Committee will be the main determining authority in matters of administration. It would therefore decide, or report for the Council's decision, any question of policy affecting the School in Rome or in England, prepare the annual report on the whole School for the Council, nominate official representatives of the School for special occasions, and make arrangements for an annual meeting. It would be the central financial body receiving interest on endowments and investments and paying salaries, scholarships, and maintenance accounts. It would receive from the Faculties, and hand on to the staff in Rome for recommendation to the different Italian authorities concerned, all applications for *permessi*. It would appoint, or recommend to the Council for appointment, the officials of the School in Rome, settle the date of the terms or sessions, and authorise the absence of officials from Rome for special purposes. It would receive the Director's representations and give decisions on any more important *res domesticæ*—*e.g.*, the condition of the fabric, the rules of the School, and allocation of quarters to students of various departments.

Duties of the Faculty of Art.

The Faculty of Art would supervise the work of the various students of Art who may come to the School with existing scholarships given by such institutions as the Royal Academy, the Royal Institute of British Architects, the Royal College of Art, and other bodies, and would assist those students by drawing up courses of study which shall fulfil the conditions attached to those scholarships. It would formulate a scheme for the scholarships in Architecture, Sculpture, and Decorative Painting to be given by the Commissioners

for the Exhibition of 1851. It would be responsible for the examination of the candidates, and would nominate the successful candidates for the Commissioners' election. It would further lay down courses of study which shall fulfil the conditions attached to these scholarships and supervise the work of these scholars. It would advise the Executive Committee on all matters concerning the interests of the students under this Faculty; it would advise the Executive Committee respecting the appointments on the staff in Rome; it would further submit a report to that Committee on the work of the students for inclusion in the annual report.

It would arrange for an annual or periodical exhibition of the work done by students of the Faculty, and also possibly for the publication of the more important drawings.

DUTIES OF THE FACULTY OF ARCHÆOLOGY.

The Faculty of Archæology would carry on those researches hitherto prosecuted by the existing British School at Rome. It would continue to publish the series of volumes (Papers of the British School at Rome, Vols. I.-V.) containing researches, and also the Catalogue of the Municipal Museums of Rome on which the School has been at work for many years. It would continue to carry on topographical research and such excavations as are possible. It would, like the Faculty of Art, make representations from time to time to the Executive Committee respecting its interests in the appointments on the staff in Rome. It would continue to administer such scholarships as the Oxford, Pelham, Gilchrist, and other studentships; and it would collect funds for its archæological undertakings. It would hold an annual meeting of its subscribers, at which it would present an annual report and balance-sheet. The report would be submitted to the Executive Committee of the enlarged School to form a section of the annual report presented by that body to the Council.

The CHAIRMAN said this great project promised to give the School a new constitution, a more ample life, and a worthy home, and to unite at one centre in Rome all the interests of British students who resort there, not merely archæological interests, but those that were artistic, architectural, literary, and historical. Among the students who had been welcomed at the British School during the whole time of its existence there were many who had made art, and, perhaps, especially architecture, their study. These students had received from the staff of the School such assistance as was consistent with the burden of their own work, and the staff had been glad to have them attached to the School. Very naturally some of the leaders of the architectural profession in England had desired that there should be in Rome a residential centre, available for British students of architecture during their stay in the city. The cramped space which the existing School occupied did not, of course, permit of provision for the accommodation of such students. The Committee of the British School were conducting negotiations with the Royal Institute of British Architects, represented for this issue by Mr. John W. Simpson, Vice-President R.I.B.A., which gave good hope of a successful issue, when the Commissioners of the Exhibition of 1851 entered the field with a more comprehensive scheme for an institution which should embrace all British artistic and learned interests in Rome, as described in Lord Esher's Memorandum.

The CHAIRMAN read the following letter with regard to the site of the future School from Sir Rennell Rodd, the Ambassador at Rome, whose services in connexion with the scheme have been of the highest value :—

Any one who could have seen the site this autumn in all its beauty would inevitably have rejoiced in our prospects. Things have so changed in Rome to-day, rents are so high and grounds so scarce, that it is quite hopeless to expect to obtain a site for a School and a hostel in the centre of the old city. The new site is within easy reach of the Vatican, a couple of hundred yards from the Villa Papa Giulio, and very near the Borghese Gallery. It will be practically included in the Villa Umberto (Borghese Gardens), the most beautiful and characteristic Roman park.

It is on high ground where the air is good and sanitary conditions will be satisfactory. I can only say that our prospects are envied by everyone here. The city will spread beyond us in future, but we shall remain in a garden and park-like area, which will be essentially Roman, as anything can be in a city which throughout its history has always been changing.

Architecture at the New British School at Rome.

Mr. Reginald Blomfield, A.R.A., Vice-President R.I.B.A., in a letter to *The Times* of the 23rd inst. headed "Architecture and the New Scheme," says :—

The Commissioners of the 1851 Exhibition will have conferred a great benefit on the art of this country by the establishment of the new British School at Rome, described in your columns to-day and ably supported in your leading article, and the art that will profit by this scheme more particularly is architecture. Wisely directed, the new British School may go far to remedy certain defects that lie at the root of much of our failure in modern architecture, both in training and practice. Though there are signs of advance towards an accepted standard, our practice is still rather go-as-you-please, and, in spite of the serious attempts at reform that have been made in recent years, our schools still gravitate towards a somewhat hand-to-mouth training. It is, perhaps, impossible that they should do much more than this for the average student. Owing to the complexity of modern architecture, the schools can do little more than provide the *minimum* equipment which will qualify for practice; but the worst of it is that students are apt to rest content with that *minimum*. Little inducement is held out to them to carry their researches further, with the result that architectural scholarship in England is almost a thing of the past, and the student's intellectual and imaginative horizon is limited to the exigencies of immediate practice and to knowledge which can be directly translated into terms of cash.

The new School of Rome will give the keen and exceptional student his chance of going further. The two or three years that he will spend there will give him a splendid opportunity for the study of the higher aspects of architecture as the art of fine planning and composition in building. He will be brought into touch with the classic masterpieces of the art; in the words of Lord Esher's Memorandum, he will be able "to gain a thorough knowledge of the principles underlying the work of the great masters," and the language

of architecture as expressed in the monuments of Rome, Sicily, and Greece will become something far more real and vital than anything he can learn from pattern-books and manuals. By his close association with other students, all picked men in their way, he would find a unique opportunity of getting into touch with the other arts. Lastly, by persistent work along well-considered and consecutive lines he and his successors may establish and carry on a certain standard of excellence in design which will be the ideal at which other students left at home will aim, and may in this way help to build up again that tradition of fine design which the French have never quite lost, and which has been utterly wanting in English architecture of the last 60 or 70 years. What is wanted in our practice of architecture is not so much individuality, of which we seem to have enough and to spare, but the discipline of the art by reference to standards established by the masters of the past—standards which are generally ignored in the rush of modern practice. The School of Rome should in the future be the centre and rallying point for the best and keenest of our students, and wisely guided should take its place as the keystone of our system of training. More than one generation will, of course, be wanted to bring about such results, and, as happened over 200 years ago in the French School at Rome, there are sure to be mistakes and disappointments; but it will be a great thing to have made a start, to have taken a step which may in the future have a far-reaching influence in steadying the erratic and disorderly methods of our modern architecture.

Early Christian Art.

A course of lectures on Christian Art is in course of delivery at King's College (University of London), the introductory lecture on "Early Days of Christian Art" having been given by Professor W. R. Lethaby [*F.*] on the 8th inst.

Professor Josef Strzygowski, Professor of the History of Art in the University of Vienna, delivered the second lecture on the 22nd inst., taking as his subject "The Origin of Christian Art." He began by reminding his audience how short a time ago it was that Hellas and Rome were considered the only soil in which all the arts had germinated. After courteous acknowledgment to his British fellow-workers in the same field, he pointed out how by the fourth century Jerusalem had taken the place of the old *caput mundi*, Rome, superseding Alexandria and Antioch as a centre of art, and leading the pilgrims that flocked to it through countries in which art was more dependent on the Hellenistic-Persian culture than on that of the Mediterranean. In the ecclesiastical architecture of the East was to be found a spirit working in individual characteristic and varied type, a spirit vigorous, innovating, creative, and cogent, totally opposed to the uniformity of ecclesiastical architecture in Rome. Nor did Constantinople offer the key to the question of the change from classical to mediæval art, as Byzantium should be looked on as a mere focus where the rays of artistic inspiration from the East met. The lecturer then further developed with a mass of illustration the contention, maintained in his works, "Kleinasien," "Orient oder Rom," and "Amida," that the main channel of communication between the ancient and the mediæval world was the East. He concluded by dwelling on the manner in which Europe had set herself to accomplish her emancipation from the influence of the East in early Christian times. Her help was Nature, and then in the second line Greek and Roman art. Byzantium, it was true, had used the ancient monuments, but she was never in touch with Nature, and so her creations were not living and never developed. There were two worlds of art, the one purely decorative—that was the inheritance of Islam; the other that of Nature and human expression, that was ours now, as once it belonged to Greece, and then to old Gothic art—the true renaissance of seeing Nature. Modern art on the Continent was seeking to guide us along the old Oriental road of pure decorative form. The history of Christian art gave us a lesson of the highest value in showing how the two tendencies might be combined in a great creative movement.

The next two lectures are announced for delivery as follows :—

Wednesday, 29th November, at 5 o'clock, Mr. G. McN. Rushforth, formerly Head of the British School at Rome: "Christian Mosaics."

Wednesday, 6th December, at 5 o'clock, Professor R. Elsey Smith [*F.*], Professor of Architecture at King's College, London: "The Early Roman Churches."

The further lectures of the course, the dates of which have not yet been fixed, are as follows :—

Dr. J. Paul Richter: "The Art of the Catacombs."

Professor W. R. Lethaby: "The Classic Age of Byzantine Art and the Architecture of Justinian."

Rev. A. C. Headlam, D.D.: "Christian Churches in Asia Minor."

Miss Gertrude Bell: "The Christian Churches of Western Mesopotamia."

Mr. R. W. Schultz: "Later Byzantine Architecture."

Mr. O. M. Dalton, of the Mediæval Antiquities Department, British Museum: "Minor Christian Arts."

Admission is by ticket, issued free to all students of King's College, and to internal students and teachers of the University. For all others the fee is one guinea for the course, or 2*s.* 6*d.* for each lecture. Application should be made to the Secretary, King's College, Strand, W.C.

The Hittite Discoveries.

The Times has received a telegram from Alexandretta announcing that Professor Garstang's party has returned to Alexandretta. Important results are reported. The Hittite royal city discovered in 1908 has been completely excavated, together with the palace, temple, and fine sculptures. A royal monument and a Hittite site were discovered in the valley north of Sakgegenzi. The expedition is leaving to resume the excavations at Meroe, in the Sudan.

Lectures on Cement.

Under the auspices of the Institute of Chemistry of Great Britain and Ireland, a series of lectures on Cement is in course of delivery by Mr. Bertram Blount, F.I.C., in the Lecture Theatre of King's College, Strand. The first lecture was delivered on the 26th October, and the second will be given on the 1st December, at 8 P.M.—admission by ticket, to be obtained from Mr. Richard B. Pilcher, Registrar and Secretary, Institute of Chemistry, 30 Bloomsbury Square. The following is a syllabus of the lectures :—

General meaning of the term and its limitation in the present discourse. The principal structural cements will be dealt with, and minor adhesives of the workshop will be touched on only incidentally and illustratively, if at all. In practice this delimits the term to calcareous cements.

Historical account of the evolution of cements in this limited sense. Cement making as a branch of chemical manufacture.

Chemical reactions and physical changes involved in the production of cements and in their setting and decay.

Modes of testing, both chemical and physical, the latter including mechanical tests as ordinarily understood. Standardisation of all tests which from their nature are arbitrary, and the devising and acceptance of standard specifications. The British Standard Specification as an example.

The uses of cements and the errors which may occur from unintelligent application.

The causes of failure of structures made with cement.

The importance of the aggregate used with cement to make mortar and concrete, and the errors which arise from want of knowledge of its properties.

The necessary equipment of knowledge and training for an expert. Physical and mechanical knowledge an essential, in addition to ordinary chemical training.

The ignorance now existing of the constitution of cement as produced and when set; the admirable but insufficient work of the past, and the consequent opportunities for rigorous research in a subject of exceptional difficulty.

Proposed Extension of Public Buildings.

Notice has been given that the Commissioner of Works intends to apply for an Act authorising him to acquire, for the purposes of the extension of public offices in Westminster, certain lands, houses, &c., " bounded on the north by Horse Guards Avenue, on the east by the Victoria Embankment, on the south by the northern boundary of Montagu House and garden, and on the west by the Banqueting House, Whitehall, the Royal United Service Institution, Gwydyr House, and the approach road to Whitehall Gardens" ; for the purpose of the extension of the Patent Office, 12 and 13 Took's Court, Holborn ; for purposes in connexion with the Public Record Office certain lands, houses, &c., forming a portion of Clifford's Inn ; and extending the period limited by the Public Offices Sites (Extension) Act 1908, for the purchase of certain lands, houses, &c., in Furnival Street and Took's Court, and also of the premises of the Institution of Civil Engineers, in Great George Street, Westminster.

Ninth International Congress of Architects, Rome 1911.

A correction is required in the translation, printed in the last issue of the JOURNAL (p. 29), of Resolution 1 passed by the Congress on Subject V., " The Execution of Works of Architecture for the State and other Public Bodies." The Resolution should read :—

" That works of architecture intended for the State, Municipalities, or other public bodies, be entrusted, after competition or otherwise, only to qualified architects."

The Statutory Examinations.

Examinations of Candidates for the offices of District Surveyor under the London Building Act, and of Building Surveyor under local authorities, held by the Institute pursuant to Statute, took place on the 26th and 27th ult. Of the ten candidates admitted, the following three passed, and will be granted by the Council certificates of competency to act as District Surveyors in London, viz. :—

REGINALD SEYMOUR ANDREWS, of 103 Bow Road, Bow, E.

JOSEPH EDWARD MUNDELL, 157 Wool Exchange, Coleman Street, E.C.

HERBERT HENRY YOUNG, 11 Tankerville Road, Streatham, S.W.

see p. 120

Control of Advertisement Hoardings.

A gratifying victory in the long war against the advertisement hoarding nuisance in the United States is reported from Boston. About six years ago, the city of St. Louis adopted an ordinance strictly prescribing how and of what materials billboards should be made and of what size they might be, and ordering the demolition of all which did not comply with the ordinance. The legality of these restrictions was contested, and the case was carried through court after court. The Supreme Court of Missouri has now sustained the validity of the ordinance, and by implication goes even beyond it. The Court holds that this form of advertising " may not only be regulated and controlled, but may be entirely suppressed for the public good under the police power of the State."

The *Daily Chronicle* of the 17th April last reported that an official called the Government President of Potsdam, whose example was to be followed by several of his colleagues, had taken summary steps to remove the unsightly advertisements which disfigured the course of railway lines in this district. The practice was carried to a scandalous extent and practically blotted out the scenery. A regulation was passed, requiring all the advertisements to be removed to a distance of 400 yards from the railway within a month of the order.

The late Mr. Edwin Austin Abbey, R.A. *[Hon. A.]*

At the General Meeting last Monday, the Hon. Secretary, Mr. Henry T. Hare, announcing the Institute losses by death since the last General Meeting in June, referred specially to the distinguished artist, Mr. Edwin Austin Abbey, R.A. His work, he said, was of a character to appeal particularly to architects, insomuch as it was work more or less of a decorative nature, and he was sure they all felt the Institute had sustained a very great loss in his death. On Mr. Hare's motion, a vote of sympathy and condolence was passed to the widow of the late Hon. Associate.

The *New York Tribune*, publishing particulars of the will of Mr. Abbey, states that the testator bequeathed Chelsea Lodge, his home in Tite Street, London, to the members of the Royal Academy for the use of the President of the Academy, stipulating that the house should be known as the Abbey House, and that his bronze bust by Onslow Ford, Mr. Abbey's oil portrait of his wife, and a piece by Augustus Saint-Gaudens should be placed there permanently, with all the furniture and plate in the house. The library at Morgan Hall, Fairford, Gloucestershire, was also left to the Academy for removal to Abbey House or to the students' room at the Academy, and a sum of $30,000 was set aside for the maintenance of the house. The fact that Mrs. Abbey survived her husband nullifies these bequests, but it is stated, says the *New York Tribune*, that Mrs. Abbey will observe the wishes of her husband.

The late Mr. D. G. Driver.

At the same Meeting Mr. Hare made sympathetic reference to the death of Mr. D. G. Driver, who for twenty years had been Secretary of the Architectural Association. Mr. Driver had been in indifferent health early in the summer and had been obliged to give up work and take a couple of months' rest in the country. He returned apparently quite recovered, and threw himself into his work again with all his old energy and devotion, but suddenly, without any warning, collapsed from heart failure and died on Saturday, 11th November. He was forty-two years of age, and leaves a widow and two young children. The intimate relations of the Institute with the Association brought Mr. Driver into frequent contact with the senior body at Conduit Street. His amiable qualities had won for him the highest regard there as at the Association, and his untimely death is very deeply deplored at the Institute. Mr. Hare remarked that everyone realised the serious nature of the loss the Association had sustained, and how difficult it would be adequately to fill his place. He concluded by asking the Meeting to pass a vote of sympathy and condolence to his widow and near relatives.

REVIEWS.

OLD VIEWS OF ROME.

Römische Veduten. Handzeichnungen aus dem XV.-XVIII. Jahrhundert. Mit Unterstützung der Kaiserlichen Akademie des Wissenschaften in Wien. Herausgegeben von Hermann Egger. Published by Friedr. Wolfrum & Co.: Vienna—Leipzig.

A few months ago we reviewed a valuable work of Herr Hermann Egger's, which consisted of a collection of architectural drawings by artists of various schools from the thirteenth to the nineteenth centuries. These drawings were published for the first time and were selected in order to show the characteristic technique of the master at his best.

Herr Egger has recently published another collection, no less valuable, of drawings dating from the fifteenth to the eighteenth centuries, confined entirely to views of Rome. The subject portrayed is the chief point of interest in this collection, both the technique and the artist being of minor importance, except in so far as the conscientiousness of certain artists is a guarantee of the accuracy of the drawing.

In the first volume Herr Egger publishes 115 plates by 41 artists, including such names as Natoire, Poussin, and Heemskerch. The examples are drawn from originals in Berlin, Dresden, Florence, Frankfort, Hamburg, London, Paris, Rome, Stuttgart, and Vienna. The drawings are for the most part reproduced in the original size, and are mounted on sheets of thin, loose cardboard, c. 18 by 13. A separate volume of similar dimensions contains the letterpress with a descriptive paragraph for each plate, also details as to the collection to which it belongs and the medium in which it is rendered. Each artist is also referred to in a short paragraph, and the reasons are given for the trust or distrust placed by the editor on any particular work. The letterpress is further enriched by 30 small illustrations of the works of the artists in question.

The idea of compiling such a set of views appears to have come to Herr Egger when he was engaged in cataloguing the collection of Philipp Freiherr von Stosch, who died in 1757. This collection, known as the "Stosch Atlas," forms the nucleus of that vast mass of views and plans of towns belonging to the Royal Library in Vienna. When preparing the Critical Inventory for the "Studies of Ancient Roman Monuments" Egger's attention was drawn to the lively interest Stosch took in various questions of the topography of the city. The special aim in forming this collection grew ever clearer to Egger as the work proceeded, and suggested the formation of a reference book of Roman views.

Authentic, accurate drawings of mediæval Rome are invaluable, not only for settling topographical questions, but for solving the most varied problems. And yet, out of the numerous views of Rome to be found in the various European collections, there are but few which on close investigation are of any

value for topographical or other scientific research. The pitfalls are many which lie in wait for the unwary, and only patient comparing and a sound knowledge of the history of Roman monuments and the present topography of the town can enable one to distinguish between the grain and the chaff.

The most important group of the views in Herr Egger's collection consist of those known to have been executed on the spot and hence presumably trustworthy. This group includes the conscientious drawings of Maarten van Heemskerch, who died in 1574. Numerous examples are, however, also included of untrustworthy drawings, in order that they may serve as a warning. For instance, drawings based on a sketch made on the spot, into which have been introduced fanciful and charming details, such as Natoire excelled in. Also fanciful drawings made by artists who probably never were in Italy, such as Momper's imaginary reproduction of the Island of the Tiber, Plate 62, and drawings made by artists who certainly never were in Rome, but who copied Roman subjects.

There are yet more misleading copies, executed during the period when an artist is known to have been in Rome, such as Jan Brueghel's copy of Paul Bril's original sketch of the Septizonium. As these ruins were pulled down in 1589 and Brueghel's work is dated 1594 this is manifestly not an original. Unfortunately such convincing dates are not always forthcoming.

Then again there are drawings reversed for engraving purposes. Usually reversed drawings may be recognised at once, but sometimes their peculiarity is only revealed when the attempt is made to establish the point of sight.

Again some artists are pleased to re-group monuments in order to compose a picture. Thus Jacob de Heusch, in Fig. 3, gives us an apparently faithful sketch of the Ponte Rotto, but playfully introduces into the background the dome of St. Peter's, whereas the Cathedral was well out of sight, behind him. As a last instance of misleading drawings one might mention the practice some artists indulged in, of introducing repeatedly into their pictures one particular Roman monument which had taken their fancy. Thus, in Fig. 5, we find that Frederick van Volckenbosch places Sta. Maria in Cosmedin in the midst of a Dutch landscape. This instance alone convinces one, far better than a series of arguments, of the importance due to a Classification of the Views of Rome, such as Herr Egger has so ably prepared. ETHEL CHARLES [*A.*].

REINFORCED CONCRETE.

Reinforced Concrete Construction, Elementary Course, with examples worked out in detail for all types of Beams, Floors, and Columns. By M. T. Cantell, Licentiate R.I.B.A. 8*o. Lond.*, 1911. *Price* 4*s.* 6*d. net.* [*E. & F. N. Spon, Limited.*]

In this book a successful endeavour has been made to compress into a very few pages the essentials of the necessary calculations for reinforced concrete beams and columns, the principles of mechanics, so far as they are essential, being presumed to be familiar to the reader. The result is that a great deal of information is given in 125 small pages of clear type, and the addition of an excellent index of ten pages renders it easy to find the particular detail sought.

Obviously, so brief a treatise cannot be expected to be exhaustive, but here and there small additions on one or two points appear desirable. For instance, on page 13, coke breeze, clinker and slag are mentioned as possible materials for use as aggregates in concrete. It is true that a warning is given as to the possible presence in the last two of "refuse which . . . will entirely destroy the strength of the concrete," but the risk of using them at all under ordinary conditions is so great that they are better prohibited in the generality of cases. Most of the material which (albeit improperly) passes as coke breeze should also not be referred to in a students' book without a word of condemnation.

Where so much useful matter is given, it is a pity that grammatical errors should have been overlooked. Upon page 12 the word "sufficient" is twice made to do duty for "sufficiently," and the following phrase occurs: "the steel in reinforced work being comparatively small with that required in ordinary steel construction." Again, we have, "Brick concrete . . . is damaged to a greater extent, but not as bad as granite . . . ." These and other similar blemishes should have been detected by the proof reader.

MATT. GARBUTT [*F.*].

Architects' Standard Catalogues.

The Architects' Technical Bureau, which was founded in 1907 to provide an expert staff to deal with inquiries relating to materials or fittings, also to make researches for architects and to give expert assistance in technical difficulties that arise in their practice, has presented to the Institute Library a handsomely bound copy of the first five volumes of "The Architects' Standard Catalogues" just issued by the Bureau. The work is stated to be the outcome of the widely expressed desire of members of the profession for the presentation, in a systematic form, of the particulars of specialities supplied by manufacturers allied to the building trade. The catalogues have been produced to a great extent under the auspices of the Hon. Presiding Committee of Architects, and no pains have been spared in their preparation. Details are given of the specialities of some five hundred manufacturers, and guard slips are provided for the insertion of annually issued supplements. The catalogues are presented in a systematically classified form, and by the excellent system of indexing adopted particulars of any material can be discovered at a glance. The volumes should prove of service if only as a time-saving means of obtaining information upon any building specialities required.

CORRESPONDENCE.

Architects' Responsibilities.

Briantcroft, Milford-on-Sea, Hants:
17 *November* 1911.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Having followed the correspondence in the JOURNAL on this subject, I am afraid I cannot arrive at the same conclusion as Mr. Hall does and as set forth in the closing sentence of his letter wherein he says, "With the Institute clause I know of nothing that will not allow the employer to come down on the builder for defective workmanship or material even if discovered after the (last) certificate has been granted."

This conclusion he appears to base on clause 30 of the Institute Conditions which sets forth that no certificate shall of itself relieve the contractor of liability, according to the terms of "*this agreement.*"

But what are the terms of this agreement? Turn to clause 17 and it will be seen that all the powers of the architect over the builder for making good defects are subject to a time limit. This in ordinary cases rarely exceeds twelve months, and, as I believe, more generally six months. I cannot find a single word to qualify that condition. What, then, is to happen if, after all is certified and the time limited has expired, real or even imaginary defects are found in the work by the employer? Surely he might with some sort of reason argue that the time limit was set by the architect, and that, since thereby he has no more hold on the builder, his case is against the architect. What then becomes of the last clause in Mr. Hall's letter?

I have no doubt he is much more qualified to give an opinion than I am, but, all the same, it seems to me that, as the conditions now stand, the architect is liable at any rate for vexatious and probably expensive legal proceedings at the hands of an unscrupulous or litigious client. What with clients who don't understand plans, clients who have impossible fads, and clients who think that by engaging an architect they are protected against all the mischief an unprincipled builder will make when he has, to their great satisfaction, undertaken work at 20 or 30 per cent. lower than a reasonable price, we have enough to do and bear.

And it does seem, therefore, the very "last straw" that an architect should be in any sense liable for the delinquencies of a builder after using every reasonable means to protect the employer therefrom.—Yours faithfully,

W. RAVENSCROFT [*F.*].

27a Sackville Street, Piccadilly, W.:
22 *November* 1911.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I am sure all practising architects will be thankful to Mr. Edwin T. Hall for his letter on this subject in the last issue of the JOURNAL. It is some relief to hear that he thinks the Statute of Limitations applies; but even if this is so (about which there appears to be some doubt), my contention is that architects should not saddle themselves with other people's responsibilities at all.

I am pleased to hear that the R.I.B.A. form of contract was not the one used in the Leicester Case, and that Mr. Hall considers our contract gives us the legal position we should have; but here again, I understand, there is some doubt, and I think the majority of architects will agree with me that no pains or reasonable expense should be spared in order to put this point beyond the region of dispute.

The Practice Standing Committee are giving a lecture on 18th December on a subject which will embrace this topic, when the discussion is likely to be interesting and instructive.—Yours truly,

DOUGLAS WOOD [*A.*].

Official Architecture.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—From the tenour of the President's Opening Address one would suppose that the policy of the Institute was the short-sighted one, to put it bluntly, of obtaining for architects in large private practice work that is at present done by public bodies, on the plea that it can be done cheaper and better. Is such a policy judicious? Assuming the plea to be approximately correct—though who ever heard of an architect whose costs came to 5 per cent. of the sum expended?—does the President propose that the Institute should attempt a revolution in the profession, for that is what it would amount to? Should not its policy rather be the protection of the interests of all classes of members, and by raising the status of the profession to influence public opinion in favour of good work?

To quote the Address:—"The right to use the title of Architect should be reserved for those who have obtained it as a result of a proper examination passed after an artistic, technical and scientific education," and "the title of Architect should be placed in the same rank as the titles Master of Arts, Doctor of Medicine, &c."—these are excellent aspirations, yet there must be many who, having attained to this rank, find through change of circumstances or other reasons that they will be unable to start practice for themselves. The career, or, more properly speaking, the means of livelihood, then open to a member of the Institute if he remain in the profession is either to continue as assistant to a private architect, reaching at last the goal of managing assistant with perhaps three pupils and two improvers under him, or to enter one of the public offices. It should be pointed out that the members of the architectural staffs in public offices are fully equal, in training, ability, and experience, age for age, to the majority of private architects, and, putting aside the remark that public offices can equally well design a prison or a palace, are often more capable specialists in their own

branch of design than outside architects. It may be mentioned in passing that, with a few rare exceptions, there are no private architects who would not undertake to design a prison or a palace, a Government office or a telephone exchange. A large proportion of the assistants in public offices are members of the Institute, and if the President would exert his and the Institute's influence to open up careers for members worthy of the rank of Architect he would find Architecture receive greater recognition from "officialdom." The result would be, owing to the increased authority of the architectural staff, better public work; and, through improved conditions of service, men who now prefer to struggle along as outside practitioners would enter the Government service, while competition outside would be so much lessened. Then in the end, without violently upsetting the present state of affairs and giving all public work to private architects to scramble for, the aim of the President would be attained; there would be more work for the practising architect and better official work done for the public, in addition to which the status of the whole profession would be raised and a position of greater dignity and honour be accorded to it.

W. J. DAVIES [*A.*].

ALLIED SOCIETIES.

Leeds and Yorkshire Architectural Society: Mr. Sydney D. Kitson's Presidential Address.—The Annual General Meeting of this Society was held at the Queen's Hotel, Leeds, on Thursday, 16th November. The President (Mr. Sydney D. Kitson, M.A. [*F.*], occupied the chair, supported by the Lord Mayor (Mr. Wm. Nicholson), and delivered the Opening Address, in the course of which he said:—

The year that has just passed has not been an important one in the history of our Society. But happy is the Society which has no history; and the object of this Society is not to make history, but to go quietly on its way, as a permanent and unpretentious guardian of the nterests of architecture and architects in this province. iIt is its business to hold a watching brief, and not to take action unless its good offices are required or its intervention is tolerably certain of success. Nothing is so harmful to a Society such as ours as undue haste in action, or the tendering of unasked-for advice which is likely not to be accepted. I therefore submit to you that it is in no sense detrimental to the Society that its name has not been in evidence in the newspapers, and I assure you that it has done a considerable amount of quiet, unseen, but none the less useful, work during the past session.

There are points, however, of a more public nature which our Council might well take in hand in the near future. Such, for instance, as a firm protest against the increase of official architecture, which is becoming a menace to practising architects, and which is costing the ratepayers and taxpayers—as was so ably pointed out by Mr. Leonard Stokes in his Presidential Address at the R.I.B.A. the other night—considerably more than if the work were put out in the fairer and more reasonable way to ratepaying and taxpaying architects. The public ought to be made to realise that they are paying more for what we may be pardonably permitted to term a worse article.

Another point which has been discussed by our Council more than once is the growing evil of builders who make their own plans with one hand and hold out their caps with the other to architects to give them work. It is a cardinal fact of elemental justice that a man cannot eat his cake and have it, and if a firm and united attitude were to be adopted by members of this Society it is reasonable to suppose that those misguided builders could be made by practical means effectively to see the error of their ways. And this brings me to the time-worn subject of Registration, a subject which requires no arguments in its favour here. I own that in my early days I was opposed to Registration, but experience has taught me to be a thoroughgoing advocate of that policy. It is unnecessary at this time of day, when every trade and profession has formed itself into a trade union, to point out the advantages which would accrue to our profession by a closer union and a sterner discipline. It ought to be impossible for an employer to bargain for a less remuneration than the modest minimum prescribed by the Institute, or for an architect to agree to such an arrangement. It ought to be impossible that architectural work should be done—and ill-done at that—by builders, plumbers, rent-collectors, and undertakers.

The Institute is moving slowly but surely towards this achievement. The policy was ably advocated, more years ago than probably he cares to remember, by one of our ex-Presidents, Mr. J. W. Connon; and it has been endorsed, I think, by everyone else who has occupied this chair. Nearly 2,000 Licentiates have already been enrolled in the ranks of the Institute. Thus a most useful element of solidarity has been obtained in furtherance of the policy of Registration. No application for the Licentiateship will be entertained after next June, and therefore all members of this Society who are eligible and still remain outside the Institute are urged to avail themselves of the opportunity. The Council of the Institute have pledged themselves to elect as Licentiates all who are recommended by the Council of their local Society without further formality. I should be grateful therefore if any who are still hesitating in the matter would come and have a talk with me about it. The amalgamation of the Society of Architects with the Institute seems likely to be accomplished in the near future. This statesmanlike arrangement has meant self-sacrifice and the exercise of much tact and common sense on both sides. The fact that such qualities have been so fully shown in these negotiations is a guarantee for the successful termination of the campaign for the statutory recognition of architects.

All this is perhaps rather dull, but I am convinced it is of the utmost importance to the profession. The reason why in the past men have held aloof from the movement is that they felt that it would mean the embracing of all—good, bad, and indifferent—who professed architecture. It has come clearly to be realised that statutory recognition is necessary because, among other things, of the increasing and intolerable burdens which recent legal decisions, with almost impish ingenuity, continue to pile upon the poor architect. It is realised that it means the inclusion, for the time being, of some who under the more stringent tests of the future would not find a place. But it will be the part of architectural education, which has made such rapid strides in late years, to raise the standard and to weed out the unfit. And so in time, though we may not live to see it, Architecture will take her place beside Medicine as a well-organised and dis-

ciplined profession, doing a work hardly less important than that of Medicine for the benefit of the community.

The most important thing of all in connection with the profession is the provision of education. Twenty years ago architectural education outside the usual office routine of pupilage hardly existed. Much progress has been made since then, and the proposed establishment of a British School of Art and Architecture at Rome is another step in advance. Hitherto the winners of studentships have wandered, sketch-book in hand, over Europe, filling up their time, doubtless very pleasantly, but with little or no discretion or continuity in their efforts. Whether Rome at the present day is the best place for the study of living architecture is, I think, open to doubt. But if we cannot all go to Rome, it is open to all students in this province to attend the architectural school at the Leeds School of Art, where, under the direction of Mr. Coombs, a very thorough and sympathetic teaching is to be obtained. . . .

The work sent in by our students is always an interesting demonstration of the standard of architectural education at the time. One learns what they are thinking about, what are their preferences, and what is their present idea of architectural design and achievement. This year the work is of a high quality, but there is not enough of it. Consequently the competition has been poor, although the work which has been submitted has, in nearly every case, reached a sufficiently high level as to demand and to obtain a prize. . . . .

A review of the state of employment among our members during the past year is not an inspiriting one, and we have to record the departure from the province of some of our number. Several firms of contractors, with honourable records behind them, have ceased business. The feeling of confidence that was in the air up to a few years ago seems to have died away, people are marking time and hesitating to invest money in building enterprise. Nor are the census returns of the current year for Leeds of an inspiring nature. It is not good news to hear that the population of the city is increasing now at a lower rate than it was this time a hundred years ago. There were then probably not five architects practising in Leeds, while now there must be ten times as many. There is, however, no reason why a manufacturing town should grow indefinitely, and there are many reasons why it should not. And, after all, a city which contains nearly half a million inhabitants is a respectable unit. Athens at the height of her artistic achievements; Florence, in the Renaissance, never contained so many inhabitants, and it is doubtful if the London of Sir Christopher Wren counted many more. It must be admitted that in artistic matters Leeds has not progressed during the past year. The starving of the Art Gallery, the suppression of its curatorship, and the abolition of municipal concerts may save a few hundreds to the rates, but one is tempted to think that they are economies bought at too dear a price. All who care for the few remaining buildings of an older Leeds will deeply regret the drastic treatment at present being portioned out to Red Hall. As usual the literary gentlemen have not spared us. In an ode to the Statue of the Black Prince the poet of *Punch* alludes to Leeds as "a haunt of misery and gloom," while a Sonnet in the *Spectator* has some hard things to say on the ugliness of Leeds. In a recently published Guide Book to the West Riding I find the following choice passage: "It is questionable whether any other city—except perhaps Sheffield—displays to the railway traveller such a scene of smoky hideousness as is offered to those who, descending from the Bramhope tunnel, and having left only a few minutes behind them the green and open valley of the Wharfe, look out towards the East along the filthy river Aire, from the summit of the viaduct which crosses the Kirkstall Road." These extracts do not make pleasant reading, but it is as well sometimes to see ourselves as others see us. It is inevitable that the stranger who approaches Leeds, expecting to find it a Vienna or a Paris, should be disappointed. Nor has the claim yet been made for the city that it is a health or pleasure resort. But it is a great manufacturing centre where nearly half a million people live and work probably as hard as in any other town in the world. And by reason of the strenuousness of their lives sunshine and pure air should be all the more necessary to their existence. Only recently a professor, speaking in Sheffield, told his audience that smoke was essential for the production of the best steel. But surely, as Mr. Gladstone once said with reference to another matter in a place not a hundred yards from where we now are, "the resources of civilisation are not yet exhausted." And it is difficult to believe that science could not produce the best steel by a more cleanly method if it were made worth the while of science to do so. People have grown so used to what is really a reproach to our civilisation, or they are so busy in making money, that they have come to regard our smoke-laden atmosphere with regret, certainly, but with resignation. The architect suffers from this nuisance perhaps more than any other member of the community, for the public are disinclined to put up good buildings when they know that they will be shrouded in soot within a year after erection. Recently a miniature "White City" has been growing up at the bottom of East Parade, built of a white terra-cotta of local manufacture, which has done much to brighten the neighbourhood. But this material is after all only a palliative whose use would never have been thought of but for the present atmospheric conditions of our big towns.

Town planning in our province has not yet passed out of the region of talk into that of practical politics. A very generally expressed desire has been, however, shown that the new colliery districts so rapidly growing up round Doncaster should be something better than the sordid mining villages to which we are accustomed. The Archbishop of York, the other day, said that now our municipalities had great opportunities put into their hands, and he believed that had there been more care and desire in the past to check individual enterprises by the common good they would have been able to present to the world something that was not only stimulating but something more beautiful and healthy than those amorphous streets which crawled up and down like ugly insects in the manufacturing districts of Yorkshire.

In Halifax a competition, with prizes given by the local member, has been held for the best plan for improving the laying out both of the town and suburbs. It is much to be desired that a similar competition should be held in Leeds. There seems an opportunity now, when additional municipal accommodation is so urgently needed, and when the Infirmary is embarked upon an extension scheme, that the approaches to the Town Hall —which stands, in its inky cloak, as a sort of Hamlet among the buildings of the world, bemused by its own surroundings—should be widened and improved. No street alteration of any kind has taken place here since the Town Hall was built, and surely it is high time that the setting to the fabric which our forebears wrought so well should be taken in hand.

There is now the chance for the correlation of some of the more important of our public buildings. The

obvious truth cannot be too often repeated that one fine building does not make a fine city; but the wise grouping together of fine buildings not only doubles the value of those buildings themselves, but also provides the only elements out of which a stately city is made. In an interesting address which the city engineer, Mr. Lancashire, read to the Association of Municipal Engineers last summer upon the development of Leeds, he said "although recent improvements have resulted in the possession of many streets and buildings of which Leeds is justly proud, it cannot be argued that reconstruction is as satisfactory as construction properly planned in the first instance, even apart from the extremely heavy extra cost. One is bound to realise that, in some cases, there has been no design beyond street-widening for better travelling facilities, no motive beyond the wider streets and the better buildings which have followed the widenings; and some of the fine new buildings have been erected where it is impossible to appreciate properly the full beauty of the architect's creation."

Now that the population of Leeds has become steady and almost stationary, and now that it is no longer needful that the owner of agricultural land at some remote distance from the city should display a notice board calling attention to his "ripe building land," the opportunity arises for a general tidying up in our suburbs. There is no longer any reason why they should resemble a miners' camp or a navvies' settlement—all barbed wire and empty tins. Because every plot in a suburban road is not built upon, it seems hard on the unfortunate people who are there that their roads should be entirely unmade and often impassable. Even now, by the exercise of some thought and by the co-operation of adjoining owners, the suburbs might be opened out from the blind alley condition in which they have so often grown up.

Probably the most important building enterprise in this neighbourhood at the present time is the city of Leeds Training College and its fleet of attendant hostels. There every care has been taken with the disposition and grouping of the various buildings; and this forethought will, I think, result in an interesting and satisfactory lay-out. There is every chance too that the suburb which will grow up around it will be carefully and effectively planned.

For the first time there is a Lord Mayor of Leeds who is connected with the building trades; and we may rest assured that Mr. Nicholson, who is an honorary member of our Society, will do what he can to promote its best interests during his term of office. . . .

Now nothing remains but to wish you a pleasant and prosperous year. The happiest life that a man can lead is an architect's life if his interests and sympathies lie that way. And, I would add, the happiest architects are the provincial architects, for they usually have a greater range and variety in their work and have more varied lay interests than is possible to Londoners. And, to crown all, they have the open country at their back with all that it means to a man's health and spirits. Nor does it seem needful, now that a traditional style is once more beginning to emerge from the chaos of clever eclecticism, and now that opportunities for study are so much greater, that the design of provincial architects should be measurably inferior to that of their London brethren.

Professor Blomfield, indeed, in his *History of English Renaissance Architecture*, speaks of "the technical inferiority in design which has to some extent characterised the work of provincial architects since the eighteenth century." Yet, of the ten best designs which he, as assessor in the recent Manchester Art Gallery Competition, selected, seven, if I mistake not, were the work of provincial architects. And one of the selected ten designs was by the Treasurer of this Society. This occurred, mind you, in a competition calling for the highest qualities in monumental planning and design.

So, although it is quite certain that we cannot all be men of genius, we can at any rate see to it that our buildings shall fulfil the sound and common-sense requirements of Inigo Jones and be "solid, masculine, and unaffected." We can put the best that is in us into our work, play the game and mind our own business, and thus ensure happiness not only to ourselves but to those who come in contact with us.

Sheffield Society of Architects.—At the opening meeting of the winter session the President, Mr. J. B. Mitchell-Withers [*F.*], in the course of his address, referred to the approaching 25th anniversary of the Society, and said during the period that had elapsed since the Society was founded nothing was more marked than the recognition, by both branches of the profession with which they were in touch, of the power of combination and organisation for good, and the education of those who were to follow them as architects and surveyors. Touching upon the question of town planning, he said it was chiefly an economic question, and while for health's sake open spaces and airy dwellings were needful, they must not forget that the house was the shelter of the family, the home of those individuals, and must always be the chief consideration in a well-planned city or town. Wide streets with costly pavements were secondary to healthy houses and playgrounds as open spaces. So far as the city of Sheffield, the largest in Yorkshire, was concerned, he expressed the hope that the wisdom and foresight of the members of the City Council might be such that the city, with its natural and beautiful surroundings, might be fated to hold the position in their great country to which it had so rapidly risen. He expressed sorrow that the architectural classes at the University were not taken greater advantage of.—The work executed by students in the Department of Architecture at the University was inspected, and much gratification was expressed at the all-round excellence of the specimens exhibited, the improvement in the measured drawings, compared with previous years, being specially noticeable.

Birmingham Architectural Association.—At a meeting of this Society on November 3, Mr. P. Cart de Lafontaine described the French system of training architects. There was, he said, in this system a training in reasoned and logical planning. No portion of the design, they taught, should be without a distinct and logical concerned purpose, and the whole scheme must be considered as a reasoned and logical development of some definite idea. The building must, in plan and elevation, express its purpose. This logical training in architectural composition was one of the most important features of the French system. All judgments of designs in competitions were influenced by that view, and it often happened that a badly-drawn or inartistically-rendered set of drawings possessing that quality were placed much higher than an attractive-looking scheme which at first sight appeared more deserving of reward. The idea was everything. He laid particular stress upon that point because it was almost invariably assumed in England that the contrary was the case, and that a nicely-got-up scheme, with all those artistic embellishments in which their French brethren excelled, was almost certain to be

favourably viewed. If the two qualities were combined in one design, the author was certain to get attention. The amount of care and time devoted by the various juries to judging the plans must be a revelation to some of our own light-hearted prize-committees, and therein lay one of the secrets of the enthusiasm and success of the Beaux-Arts School.

Manchester Society of Architects.—At the Meeting of this Society on the 8th November, Dr. J. J. Burnet, A.R.S.A. [*F.*], who was the visitor for the evening, instead of reading a formal paper, led what was announced as an informal discussion, mainly upon points arising from an exhibition of drawings of his own work which had been on view for a few days. In opening the discussion, Dr. Burnet said that they were there that evening in a spirit of *camaraderie*. He would say that his works there shown represented genuine pleasure in solving problems placed before him by his clients. It had been his privilege to work for clients, themselves highly trained technically—shipbuilders and mechanics, who clearly enunciated the problems set before him. He also spoke of the pleasure which he had always found in travelling in pursuit of knowledge to equip him for his work. In the course of the conversation which followed, Mr. Burnet outlined the inception of the scheme of extension of the British Museum. The splendid drawings of the work provided fruitful ground for discussion, and the way in which the minutest details had been thought out was in many ways a revelation. Besides the drawings of the museum, photographs and details of many other works of Mr. Burnet were exhibited.

On the 22nd November, Mr. P. Abercrombie, of the Liverpool School of Town Planning, gave a lecture on the contrasted development of Paris and Vienna. Speaking of Vienna first, he gave plans showing the development from the old mediæval town which still remains in the centre. He explained how the old line of fortification was adapted to form the Ringstrasse, and how in laying out this street open spaces were arranged opposite to and between their public buildings. With maps of the district he showed the open belt of country well wooded and picturesque which surrounds the town and which is to be left unbuilt upon for ever. The factories were placed on the south-east of the town; the prevailing north-west wind thus carrying away the smoke. Turning to Paris, the Roman Cross Roads had formed the basis of the modern town. In all the modern improvements both of Napoleon and Haussmann the vista had been the principal motive. In obtaining this the individual buildings were of necessity subservient to the general lines, and in this way Paris had always been more fortunate than Vienna. Mr. Abercrombie had many excellent slides of the buildings and streets.

Glasgow Institute of Architects.—At an Extraordinary General Meeting of this Institute, held on the 15th November—Mr. John B. Wilson [*F.*], President, in the chair—a subject of considerable importance not only to the profession but to the public which builds was under consideration. The increasing tendency during recent years to select an architect only after obtaining competitive plans from a greater or lesser number is looked upon as a serious burden to all engaged in this work, owing to the very large outlay involved, combined with the remote and uncertain chance of any return. The evil is increased by the fact that, owing generally to inexperience or short-sightedness on the part of the promoters, the conditions embodied in the advertisement or invitation to compete are often so unsatisfactory as to render the selection of the best design in many cases little more than a hazard, with, of course, a corresponding inefficiency as regards the building when erected. The Royal Institute of British Architects at present debars its members, under penalty, from engaging in competitions the conditions of which are considered unsatisfactory by the Council, and a similar course has been followed by several of the Allied Societies throughout the country. After prolonged consideration of the subject, the Glasgow Institute adopted some time ago in general assembly the principle involved, and the meeting of the 15th was held to consider the methods to be adopted towards carrying it out as proposed in a series of resolutions brought forward by the Council. In the course of a lengthy discussion considerable divergence of opinion was manifested with regard to some of these, and on a vote being taken it was decided by a majority to remit the scheme back to the Council for reconsideration in detail.

MINUTES. II.

At the Second General Meeting of the Session 1911-12, held Monday, 20th November 1911, at 8 p.m.—Present: Mr. Leonard Stokes, *President*, in the Chair; entered in the attendance-book the names of 32 Fellows (including 14 members of the Council), 52 Associates (including 2 members of the Council), 5 Hon. Associates, 35 Licentiates, and numerous visitors—the Minutes of the Meeting held 6th November, having been printed in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary having announced the decease of Messrs. Edwin Austin Abbey, R.A., *Hon. Associate*, elected 1905; William Forrest Salmon, *Fellow*, elected 1876, Past President of the Glasgow Institute of Architects, and sometime member of the R.I.B.A. Council; and David George Driver, for twenty years Secretary of the Architectural Association (London), it was resolved, on the motion of the Hon. Secretary, that the regrets of the Institute be entered on the Minutes of the Meeting and that a vote of condolence be passed to the relatives of the deceased gentlemen.

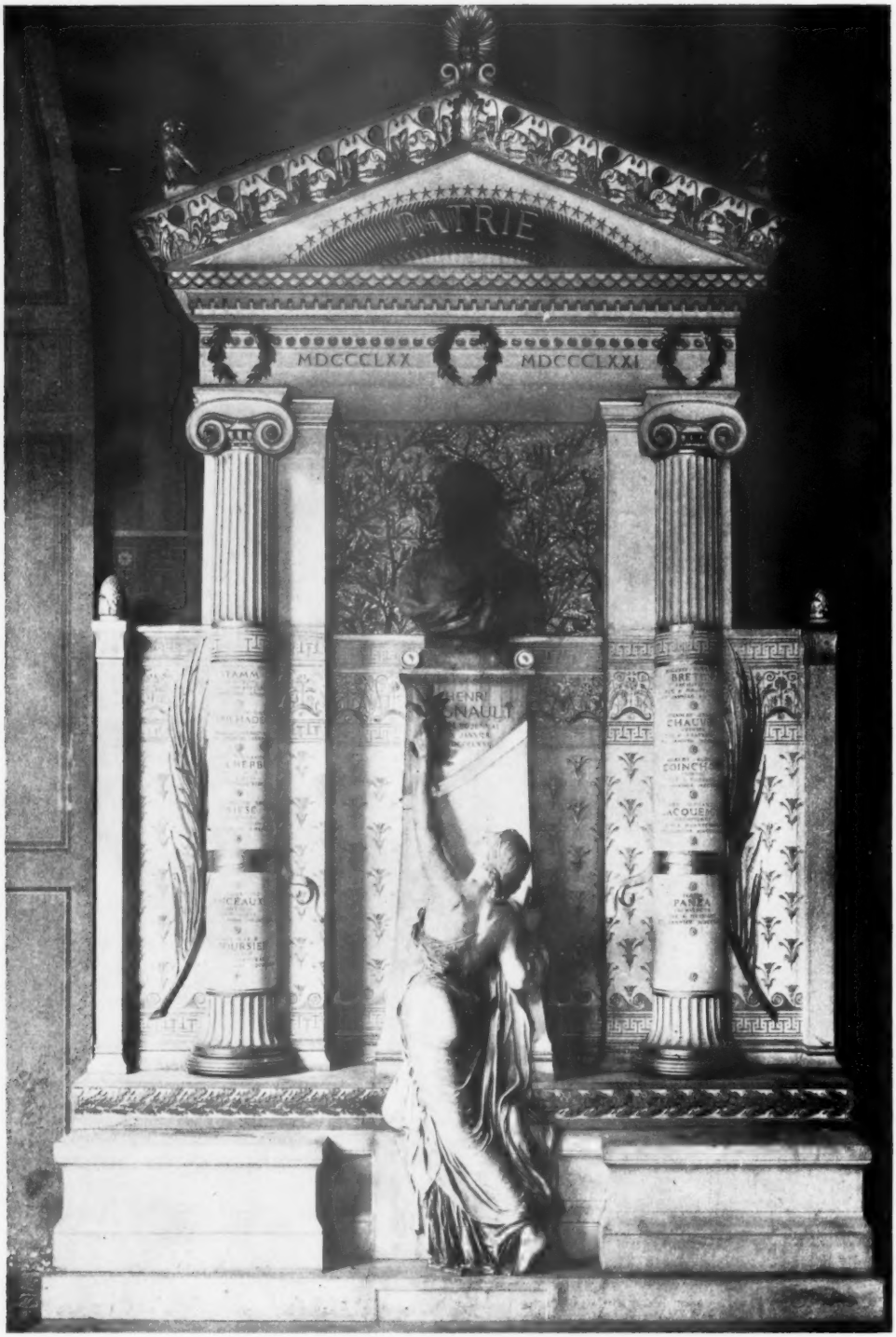
The decease was also announced of William Henry Hill, *Fellow*, elected 1888; James Pigott Pritchett, *Fellow*, elected 1863; George Ransome, elected *Associate* 1880, *Fellow* 1906; and John Davidson and Harry Edward East, *Licentiates*.

The Hon. Secretary having announced that Mrs. Arthur Cates had presented to the Institute a handsome mahogany cabinet containing an important collection of photographs of buildings in Italy, Greece, &c., a vote of thanks was passed to Mrs. Cates by acclamation.

The following Members and Licentiates attending for the first time since their election were formally admitted by the President—namely, John Cooper Ainsworth and David Wickham Ayre, *Associates*; John William Abraham, Harold Oakley, Walter Snell Bishop, Eric Edwin Hodder, Raymond Sheppard, Augustus William Newman, James Arthur Chubb, *Licentiates*.

A Paper on MODERN FRENCH SCULPTURE having been read by Mr. H. Heathcote Statham [*F.*], and illustrated by a large collection of lantern slides specially prepared for the occasion, a vote of thanks, moved by Sir William Goscombe John, R.A. [*H.A.*], and seconded by Professor W. Robert Colton, A.R.A., was passed to Mr. Statham by acclamation.

The proceedings closed and the Meeting separated at 9.50 p.m.



MONUMENT TO REGNAULT IN THE ECOLE DES BEAUX-ARTS.

Figure holding up the palm by Chapu.